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Psychological Issues, Interventions and Remediations



Editors

Prof. Suresh Makvana, Ankit Patel, Dr. Dileep Sharma, Dr. Arpita Kackar



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Psychological Issues, Interventions and Remediations

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Author Helpline: +91 76988 26988

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*DIRECTOR & CO-FOUNDER, AD EXECUTIVE TRAINING &
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Message from the Desk of Editor

It gives me great opportunity to present the forth volume of IJIP, the measure of progress. The concept of a Journal of Indian Psychology has been developing for over few years and finally another issue has come to fruition. From this edition we will have ISSN for online 2348-5396 and print 2349-3429, ZDB-No.: 2775190-9, IDN: 1052425984, CODEN: IJIPD3, OCLC: 882110133, WorldCat Accession: (DE-600) ZDB2775190-9, ResearchID: P-8455-2015 in our publication. RedShine Publication, Inc is grateful to the contributors for making this Journal a reality.

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The journal gives preference to psychological oriented studies over experimental and mind studies.

The Journal would publish peer-reviewed original research papers, case reports, systematic reviews and meta-analysis. Editorial, Guest Editorial, Viewpoint and letter to the editor are solicited by the editorial board. Large numbers of research papers were received from all over the globe for publication and we thank each one of the authors personally for soliciting the journal. We also extend our heartfelt thanks to the reviewers and members of the editorial board who so carefully perused the papers and carried out justified evaluation. Based on their evaluation, we could accept some research papers for this issue across the disciplines. We are certain that these papers will provide qualitative information and thoughtful ideas to our accomplished readers. We thank all the readers profusely who conveyed their appreciation on the quality and content of the journal and expressed their best wishes for future issues. We convey our deep gratitude to the Editorial Board, Advisory Board and all office bearers who have made possible the publication of this journal in the planned time frame.

We humbly invite all the authors and their professional colleagues to submit their research papers for consideration for publication in our upcoming issues as per the “Scope and Guidelines to Authors” given at the website. Any comments and observations for the improvement of the journal are most welcome.

Prof. Suresh Makvana, PhD¹
Editor in Chief,
HOD & Professor, Dept. of Psychology,
Sardar Patel University,
Vallabh Vidyanagar,
Gujarat, India

¹ ksmnortol@gmail.com

Message from the Desk of Special Issue Editors

It gives me immense pleasure to write on the occasion of the publication of “*Psychological Issues, Interventions and Remediations*”, a special edition of the “*International Journal of Indian Psychology*”. TEPSE & HEPSN Centre of Jai Narain Vyas University, Jodhpur organized a National Conference on ‘Current Educational Perspectives: Strength & Interventions’ on 15-17 Oct, 2016. The glorious decade achieved by our centre is the result of the farsightedness of the great visionary Prof. Ravi. K. Gunthey. His constant endeavor is to carry it to the ‘Wuthering Heights’ and to bring it out as the best in entire country. I recollect the day when this infant TEPSE & HEPSN centre opened its eyes on 15th July 2006 with just 2 students. A seedling growing into a tree, 10 years of age and nurturing almost 80 Special Children. I am sure his blessings will help us to work energetically, sincerely and honestly for the righteous cause. This centre is trying to get along with the need of the time.

The conference had almost 350 delegates from across the country. The best papers of the conference are hereby been incorporated and in this special issue of the Journal. It will be of great help to enlighten minds and pave the way for the holistic growth of young researchers. For long, Psychologists, Special Educators have been involved not only in identifying the needs of school going children and their families but also been providing assessment, evaluation, and intervention services. I hope to see this publication becoming an important addition to our offering and to see Researchers making the most of the opportunity and applying the acquired knowledge, which is way more than just ‘learning’.

A word of gratitude to Editor-in-Chief, Prof. S.M. Makvana and Managing Editor Mr. Ankit Patel, IJIP-International for publishing a special issue on our conference. My sincere thanks to Dr. Dileep Sharma and Dr. Himanshu Swadia, who have poured their heart in compiling and editing these papers. My earnest gratitude to every individual who has contributed their paper in this journal. I am also grateful to my team members Dr. Hemlata Joshi, Mr. Umed Singh Inda and Mr. Yogendra Singh Shekhawat without whom this mammoth task could not have been achieved.

In the end, it would sum up with these lines of Tagore-

*“I slept and dreamt that life as joy
I awoke and saw that life is service
I acted and behold service was joy”*

Best Wishes

Dr. Arpita Kackar

Chairperson, National Conference-2016

TEPSE & HEPSN Centre,

Jai Narain Vyas University,

Jodhpur, India

* * *

I am extremely happy to know that the TEPSE & HEPSN Centre, J. N. Vyas University, Jodhpur is bringing out their National Conference proceedings in a book form. This enhances the documentation culture of the institute. This would definitely create an impact in the minds of readers, by way of providing larger visibility and dimensions towards the psychological interventions and remediation.

I place on record my deep appreciation of the commendable work done by the authors for their insightful contributions in research. It is expected that the recommendations of conference will go a long way in ensuring the psychological wellbeing of students as well as community.

Best Wishes

Dr. Dileep Sharma

Asstt. Professor in Special Education,

Department of Psychology,

S.P. University, Vallabh Vidyanagar,

Anand – 388120. (Guj.), India

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Impact of Violent Television Serials on Anxiety Level in School Going Children

Alisha Juneja^{1*}, Dr. Arpita Kackar²

ABSTRACT

In the present world, there are more than plenty reasons for anxiety. The 21st century witnesses anxiety level of the general masses akin to those of asylum patients of the last few centuries. The present study was conducted to assess anxiety level in school children who watch violent serials and to assess the anxiety level in school children who do not watch violent serials. Sample of 40 children was taken, who took the test- in those 20 children who watch violent serials and 20 who do not. The sample was collected irrespective of their gender. Results indicated that those children, who frequently watched violent television shows, were more anxious regarding academic related tasks as compared to those who did not watch such shows.

Keywords: *Anxiety, Violence, T.V. Serials, School Going Children*

In the present world, there are more than plenty reasons for anxiety. The 21st century witnesses anxiety level of the general masses akin to those of asylum patients of the last few centuries. To add on to the list of worries, the media mode used for entertainment ensures viewership at any cost- be it violence depiction or crime enactment. This research used the Academic Anxiety Scale for Children (Hindi version) by Doctors Singh and Gupta (1986) to assess the anxiety level in school students from 5th to 8th grades; 40 students were selected out of which 20 were the viewers of violent serials and 20 students who did not. The hypothesis is confirmed. Emotional and societal pressure is increasing day by day particularly at school stage. Conflict, anxiety and frustrations are occurring in all the domains of life. Apart of the usual achievement related crisis a child faces, the oncoming of media advancement also poses another problem. While in the last few decades, students of a wide range laid back with cartoons as entertainment or video games; today, however, the parents find themselves in a crisis never faced before.

Previously, parents had to never worry about what the child chooses to watch. The child naturally chooses animated creatures of vivid colours. Today, the parent has to ensure that the

¹ P.G. Student, Department of Psychology, J.N.Vyas University, Jodhpur (Raj.)

² Assistant Professor, Department of Psychology, J.N.Vyas University, Jodhpur (Raj.)

*Responding Author

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child watches appropriate channels for his age as the hoard of high TRP's has led to a blind line of serials which although bring their due audience, but fail to notice their impact on today's youth. *Jacklyn et al. (2012)* explored whether or not violence in the media causes signs of anxiety in youngsters ages 6-12. By reviewing case studies, they found that there was some proof to support this premise as well as proof that did not.

Scary TV has a relatively small influence on children's internalizing emotions overall, and this link was not significantly moderated by whether the televised material was truthful (e.g., news) or fictitious or contained violence. *Pearce et al. (2015)*. Diffusive relations between early childhood, violent television exposure and damaging socio-emotional and academic consequences, empirically support the view that access to early childhood violent TV represents a threat to populace health and should be discouraged by adult caregivers. *Fitzpatrick et al. (2012)*.

For children and preteens, total mass media consumption envisage ill being while for preteens specific technology uses, including video gaming and electric communication, predict ill-being. For youths, nearly every type of technical activity predicted poor health. *Rosen et al. (2014)*. Divergent differences between Canadian and U.S. students, with Canadian pupils reporting significantly higher level of anxiety, particularly of violent crime. The impact of media on fear was varying between the two groups, but media tended to exert a wider range of influence on the American students' fear of violence. *Kohm et al. (2011)*

Results revealed that juxtaposition of the story had a significant impact on older children's answers but not those of younger children. In particular, older children were more probable to be frightened by and identify themselves personally susceptible to a story about local as contrasting to a nonlocal violent. *Smithe et al.(2011)*. Bi-variate examination of high violence-exposed children showed approximately 39% of both girls and boys with clinically high scores in at least one trauma symptom group. The results support the need to classify and to provide amenities for children exposed to violence. *Singer, et al. (2014)*.

Cheung, et al. (2016) the amount of TV viewing on a weekday, applied relatively strong cultivation effects on the teen-age viewer's mean world value, in relations of materialism and trivialization of ethical value. The cultivation effect is attributable to the abundance of violence and consumerism on profitable television in Hong Kong. Hence it can be safely said that there indeed is an association between anxiety and the content a child is subjected to through the media, especially violent serials.

Objectives

1. To assess anxiety level in school children who watch violent serials.
2. To assess the anxiety level in school children who do not watch violent serials.

Impact of Violent Television Serials on Anxiety Level in School Going Children

Hypothesis

It was hypothesized that the anxiety level will be higher among those students who regularly watch violent television.

METHODOLOGY

Design

It is a field experiment research in which control is used to the maximum to maintain neutrality of the environment. The contents of violent television serials (crime serials namely “*Crime Patrol*” and “*Savdhan India*”) were taken as Independent variable whereas anxiety level was the Dependent variable. Amounting to four or more hours per day and the contents of specific serials were taken as control. Children from standards 5th to 8th (9-13 years) belonging to middle class families were selected.

Sample

The researcher approached 60 families and explained the purpose of the study; 25 families gave their consent to conduct the test on their wards. There were 40 subjects who took the test- in those 20 children who watch violent serials and 20 who do not. The sample was collected irrespective of their gender. Also, in each section; 5 students were taken from the Madhuban Public School (Jodhpur) whilst the other 5 were randomly collected.

Tool

The researcher employed the Academic Anxiety Scale for Children (AASC) (Hindi Version). The scale is devised by *Singh and Gupta (Patna)*. There are 20 questions in the test; each has one mark for yes response and zero for no. For question no. 4, 6, 16 and 18; the scoring scheme is opposite, i.e., zero for yes response and one for no response. The maximum marks is 20. Percentile norms are given for the set of score; these percentiles then indicate if the child is very anxious, average or very less anxious. The test-retest reliability was 0.60 and the split-half reliability was 0.65.

RESULT

The researcher calculated scores of all the 40 subjects and dividend them into two categories- those students who watch violent serials& those who don’t. Then, mean values for each column, followed by the standard deviation were calculated; After calculating these values, t test was applied.

The values obtained are tabulated below:

Table depicting Mean and S.D. values

Group	Mean	S.D.	‘t’	Significance Level
Students who watch	14.35	1.49	9.29	$p<.01$
Students who don’t	9.05	2.06		

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The values of t test were calculated for significance of difference between the two means. With respect to the values obtained, it can be inferred that the numbers are of significance. Questions pertaining to situations of faculty, class and principal interactions; performance in exams, class presentations, etc. represents higher score for the subjects who watch the violent serials. In other words, those who frequently watched violent television shows were more anxious regarding academic related tasks as compared to those who did not watch such shows.

DISCUSSION

This research is in line with *Fitzpatrick, et al. (2012)* who stated Diffusive relationships between early infantile, violent television experience and damaging socio-emotional and academic consequences, empirically support the opinion that access to early childhood violent TV represents a threat to populace health and should be discouraged by adult caregivers. The previous studies regarding Scary television by *Pearce, et al. (2015)* stated it has a comparatively small influence on children's internalizing emotions and for children and preteens, total television consumption envisage ill being while for preteens precise technology uses, including video gaming and electric communication, predict ill-being by *Rosen, et al. (2014)*; stand with present research findings. Also, bi-variate examination of high violence-exposed children showed approximately 39% of both girls and boys with clinically high scores in at least one trauma symptom group. The results support the need to classify and to provide amenities for children exposed to violence by *Singer et al. (2014)*; support our premise. Furthermore, mature children were more likely to be scared by and perceive themselves personally susceptible to a story about local as opposed to a nonlocal violent, according to *Smithe et al. (2011)* which stand true to the researcher's hypothesis.

CONCLUSION

The research was a typical analysis of the effects of violent tele on young minds- that choice of such programs increases anxiety level in children as opposed to frequenting cartoons or anything else. Using t test, the comparison of these groups was significant. This is evidence of our initial assumptions that while such shows bring awareness to the masses, bring distress to children. Though this study was conducted on a very small sample if the number is increased, it will further strengthen the findings.

Acknowledgments

The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Cheung, C., Chan, C. (2016) Television viewing and mean world value in Hong Kong's adolescents. *Social Behaviour and Personality: an International Journal*, Volume 24 (4), 351-364.
- Fitzpatrick, C., Barnett, T., Pagani, L. (2012) Early Exposure to Media Violence and Later Child Adjustment. *Journal of Developmental & Behavioral Pediatrics*, Vol 33 (4), 291-297
- Jacklyn, C. (2014) The Association of Symptoms of Anxiety in Children Ages 6-12 and the Exposure to Violence in the Media. *Honours Theses*, Vol 12 (6), 122-154.
- Kohm, S., Lindberg, C., Weinrath, M., Connor, T., Rhonda, S., & Dobbs, R. (2011) The Impact of Media on Fear of Violent among University Students: A Cross-National Comparison. *Canadian Journal of Criminology and Criminal Justice*, *Canadian Journal of Criminology and Criminal Justice*, Vol 54 (1), 143-185.
- Pearce, L., Field, A. (2015), The Impact of "Scary" TV and Film on Children's Internalizing Emotions: A Meta-Analysis. *Journal of behavioural psychology*, Vol 2 (8). 112-145.
- Rosen, L., Lim, A., Carrier, L., Cheever, N., Ruiz, J., Mendoza, J., & Rokkum, J. (2014) Media and technology use predicts ill-being among children, preteens and teenagers independent of the negative health impacts of exercise and eating habits. *Computers in Human Behavior*, Vol 35, 364-375
- Singh, A., & Gupta, A. (1986) Manual for Academic Anxiety Scale for Children. *National Psychological Corporation*.
- Smithe, S., Wilson, B. (2010) Children's Reactions to a Television News Story, *Communication Research Journal*, Vol 27(5), 641-673.

Efficacy of Computer Assisted Instructions on Academic Achievement of Intellectually Disabled Children

Dr. Dileep Sharma^{1*}, Dr. Himanshu Swadia²

ABSTRACT

The main aim of present research work was to find out the efficacy of Computer Assisted Instructions on the academic achievement of the Intellectually Disabled Children. For this study, investigators have selected; sample of 28 intellectually disabled children, with the help of purposive sampling technique. The total sample was divided into experimental (15) and control (13) groups purposively. Academic achievements were measured by Educational Assessment Checklist for Children with Intellectual Disabilities (EACCID). The study took place over a period of six months. The first group was the experimental group in which the meeting with the teachers occurred before the intervention days to review the procedure. During the meeting suggestions regarding the procedures were incorporated. Findings concluded that exposure of Computer Assisted Instructions had the significant impact on academic skills of Intellectually Disabled Children whereas regular classroom teaching instructions are less effective than Computer Assisted Instructions.

Keywords: *Efficacy, Computer Assisted Instructions, Intellectual disability*

Children with intellectual disabilities are one of the most marginalized and excluded groups of our community. They are facing daily discrimination in the variety of negative attitudes, lack of adequate policies and legislation; these children are effectively barred from realizing their rights to healthcare, education and even survival. A disability is any restriction or lack of ability to perform an activity in the manner on within the range considered normal for a human being. Frequently the intellectually disabled children failed to perceive recognition protection and respect of human rights; the opportunities for education, vocational training as well as occupational training are limited.

History of the use of technology in education for marginalized pupil takes us to the stage when the subject matter became available in the form of printing material and textbook. It was soon

¹ Assistant Professor in Special Education, Sardar Patel University, Vallabh Vidyanagar, Anand, India

² Assistant Professor in Special Education, Sardar Patel University, Vallabh Vidyanagar, Anand, India

*Responding Author

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supplemented by the use of teaching aids like blackboard, specimen, picture, charts, models, maps and figures. In this way, the earlier concept of educational technology was limited to the use of simple audio-visual and meant for direct teaching learning.

"Computer-assisted instruction" (CAI) refers to instruction or remediation presented on a computer. Computer programs are interactive & illustrate a concept through attractive animation, sound & demonstration. They allow students to progress at their own pace & work individually or problem solves in a groups. The technology advance in General education, as well as special education, is of recent origin. A pilot project on computer literacy was launched in 1985 by Department of Education in a number of regular schools. Presently in a number of states, regular school education includes computer literacy as a part of the curriculum.

Computer assisted instruction (CAI) programs focus on practice drills, the NCTM (1989) recommends that educators not focus solely on the rote practice and isolated facts, but 38 rather emphasize problem solving, number sense, and patterning. It is suggested that drill and practice has a place in CAI, but only after children have mastered the conceptual understanding of the target skills (Hasselbring, Goin, & Bransford, 1988).

Burns, Kanive, and DeGrande (2012) evaluated the use of a supplemental computer software program for at-risk third and fourth grade children to practice mathematics facts three times per week for eight to fifteen weeks on computational fluency. Compared to the control group that received much less time with the CAI, the intervention group experienced significantly larger gains in math fluency scores.

Kumar, M. Sharma, D. and Swdia, H. (2012) indicated that intellectually impaired adolescents, who received the reading intervention programme with computer materials, significantly improved their phonological awareness, word recognitions and letter naming skills relative to their peers who received a reading intervention programme with only regular teaching learning material.

Statement of the problem

The present investigation attempts to “*Efficacy of Computer Assisted Instructions on Academic Achievement of Intellectually Disabled Children*”

CONCEPTUAL CLARIFICATION

Computer Assisted Instruction: Computer-assisted instruction (CAI) refers to instruction or remediation presented on a computer. Computer programs are interactive & illustrate a concept through attractive animation, sound & demonstration. They allow students to progress at their own pace & work individually or problem solves in a groups.

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Intellectual Disability: refers to: “a condition of arrested or incomplete development of mind of a person which is specially characterized by sub normality of intelligence” (PwD Act, 1995)

Academic achievement: Academic achievement refers to a student's success in meeting short- or long-term goals in education.

Objectives

1. To find out the effectiveness of Computer Assisted Instructions on mild intellectually disabled children.
2. To examine and evaluate the effectiveness of Computer Assisted Instructions on social inclusion of mild intellectually disabled children.
3. To examine and evaluate the efficiency of Computer-Assisted instruction on the academic inclusion of children with mild intellectual disability.

Hypotheses

1. Presentation of Computer Assisted Instructions will help to improve the academic performance of mild intellectually disabled children. (Ha1)
2. There will be no significant difference between pre & post-test scores of the control group with reference to academic skills of mild intellectually disabled children. (Ho1)

METHODOLOGY

Design

It was a quasi-experimental study; the intellectually disabled children were tested in special schools. In this investigation, the independent variable was the presentation of Computer Assisted Instructions whereas dependent variables were the academic achievement of intellectually disabled children. The details of design as follows:

Experimental Group

Assessment	Presentation of Computer Assisted Instructions	Assessment
Academic Skills	Duration – 4 months	Academic Skills

Control group

Assessment	Presentation of Regular Teaching Instructions	Assessment
Academic Skills	Duration – 4 months	Academic Skills

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Population

The population of the present study consisted of the mild intellectually disabled children of Anand District of Gujarat State.

Sample

For the present research work investigators have randomly selected a sample of 35 mild intellectually disabled children initially. Students with other associated conditions and other categories were dropped out purposively and out of 35 students, 30 were selected with the help of purposive sampling technique. Case Studies of 30 mild intellectually disabled children were taken and then divided into experimental and control group randomly. Out of 30 children, 2 of the children from the control group were dropped out because of transfer of their parents to another city. Finally the research work was started with a total sample of 28 mild intellectually disabled children. These children were diagnosed on the following basis: Interaction and observation of intellectually disabled children.

- Parental interview
- Teachers interview
- Screening through Intelligence test

No child was selected if he/she is having any other associative disorder.

Details of sample

Experimental Group	Control Group	Total
15	13	28

Tools

1. ***Educational Assessment Checklist for Children with Intellectual Disabilities (EACCID)***
– by Lal, R. et al. (2012): *EACCID* focuses on the assessment of functional academic skills. These include reading, writing, and math with their pre-requisites, their daily living and community skills. All the items can be administered to children who speak English or Hindi. The tool has four domains that are Reading, Writing, Math and Social Skills further divided into sub-areas.

Procedure

The study took place over a period of six months. The researchers had worked with thirty children with Mild intellectual disability (age group 9 to 12 years) who were randomly placed into two groups i.e. experimental and control. The first group was the experimental group in which a meeting with the special educators occurred before application of CAI days to review the procedure. During the meeting suggestions regarding the procedures were incorporated. The two special educators were provided a formal training of one week. The CAI package developed by NIMH was used according to their regular classroom curriculum with the help of their

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teachers. Before giving intervention to both the groups, pre-assessment was conducted to evaluate their thinking pattern. One and half hour computer assisted instructions were given to the children per day by the trained special educators. During the intervention period, follow-up process was also done by the investigator regarding the proper application of CAI package in the experimental group.

In the second group, which was the control group, CAI package was not produced. Regular classroom teaching methods were used for instructions. The curriculum content was same as the experimental group. After the completion of the four months intervention period, participants in both the control as well as the experimental group were administered assessment through the tools used for the pre-assessment process.

Statistical Analysis

In the present study, to find out the significant difference between Pre and post assessment of mild intellectually disabled children, Mean, SD and Paired sample 't' tests were calculated.

RESULT AND DISCUSSION

Table: 1 Showing Mean, SD and 't' values between pre & post test scores of experimental group for various academic areas.

Measure	Group	N	Mean	SD	't'	Sig. Level
Auditory	Pre-test	15	7.33	1.75	7.08	$p < .01$
	Post-test	15	11.13	2.50		
Visual Perception	Pre-test	15	16.46	2.47	12.60	$p < .01$
	Post-test	15	23.06	3.36		
Word Recognition	Pre-test	15	4.80	.86	5.77	$p < .01$
	Post-test	15	6.53	.91		
Phonetics	Pre-test	15	16.13	1.76	12.93	$p < .01$
	Post-test	15	24.01	3.00		
Reading Comprehension	Pre-test	15	5.73	1.53	1.60	NS
	Post-test	15	6.20	1.85		
Reading Skills	Pre-test	15	4.00	0.92	1.43	NS
	Post-test	15	4.48	0.97		
Reading Hindi	Pre-test	15	37.00	7.96	6.69	$p < .01$
	Post-test	15	44.86	6.03		
Pre-Writing	Pre-test	15	37.93	4.84	3.15	$p < .01$
	Post-test	15	43.46	3.88		
Hand-Writing	Pre-test	15	25.13	6.42	1.72	NS
	Post-test	15	25.80	6.71		
Numerical Concepts	Pre-test	15	42.26	15.48	14.47	$p < .01$
	Post-test	15	122.53	16.93		

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Measure	Group	N	Mean	SD	't'	Sig. Level
Time	Pre-test	15	26.00	5.83	8.10	$p<.01$
	Post-test	15	37.66	1.79		
Money	Pre-test	15	42.46	4.05	1.42	NS
	Post-test	15	43.33	4.43		
Measurement	Pre-test	15	26.13	6.67	1.46	NS
	Post-test	15	27.00	6.36		

It may be observed from table 1.1 that scores of both the sessions i.e. pre and post test have a significant difference on Reading domain (Auditory). Calculated 't' value is to be found significant ('t'=7.08, $p<.01$). Mean scores of pretests and post tests are 7.33 (SD=1.75) and 11.13 (SD=2.50) respectively. On the basis of a significant mean difference, it can be said that Computer Assisted Instructions play a significant role in Auditory Skill development of intellectually disabled children. They identified the sound, its high and low pitch, followed the directions, repetition of words spoken by the teacher, more easily after the presentation of Computer Assisted Instructions.

It is evident from Table 1.2 that significant difference is to be found between pre and post scores of mentally challenged children on Reading domain (Visual Perception) in the experimental group. The mean score of Pretest and Post-test are 16.16 (SD=2.47) and 23.06 (SD=3.36) respectively. 't' ratio is reported significant ('t' = 12.60, $p<.01$). On the basis of this significant difference, one can say conclusively that Computer Assisted Instructions has a significant impact on visual perception. After the exposure of Computer Assisted Instructions of 120 days, Intellectually Disabled children have shown a remarkable change in Visual Perception area. They can now easily Identify, Match and sort the objects of different shapes, sizes and colours into group.

An analysis of table 1.3 shows that the two sessions are under study i.e. scores of pre-test session and post session differ significantly on Reading domain (Word Recognition). 't' value and mean scores for Reading domain (Word Recognition) in which mean difference is to be found significant ('t'=5.77, $p<.01$). Mentally challenged children have scored higher in post-test (M=6.53, SD=.91) than pre-test (M=4.80, SD=.86). On the basis of significant mean difference, it may be said that application of Computer Assisted Instructions is effective on Word Recognition. In other words, mentally challenged children have shown development after exposure of Computer Assisted Instructions, Students were better able to sound out words compared to control group. They can now use word recognition skills to identify written words while at the same time they are using their general verbal knowledge and language comprehension abilities to construct the meaning of what they are reading.

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When 't' test was applied to check the impact of Computer Assisted Instructions on Reading domain (Phonetics) of intellectually disabled children, a Mean score of Pre-test and Post-test are differed significantly (table 1.4) with each other on Reading domain (Phonetics). The calculated paired sample 't' value is significant ($t=12.93, p<.01$). The mean value obtained in Pre test and Post test for Phonetics are $M=16.13$ ($SD=1.76$) and $M=24.01$ ($SD=3.00$) respectively. It can be concluded that Computer Assisted Instructions has a greater impact in developing Phonetics in mild intellectually disabled children through various methods and programs such as Corrective Reading, mnemonics, stimulus response, prompt fading, and direct instruction in phoneme blending and segmenting.

An analysis of Table 1.5 indicates that insignificant mean difference is to be found between pre and post test scores of intellectually disabled children on reading domain (Reading Comprehension). Experimental group scores slightly higher mean in Post-test ($M=6.20$, $SD=1.85$) than the Pre-test ($M=5.73$, $SD=1.53$). The calculated paired sample 't' test value is reported $t=1.60, p>.05$. On the basis of insignificant difference, it can be said that Computer Assisted Instructions, however, made Reading comprehension skills better in mentally retarded children as compared to controlled settings but it is statistically not significant.

Furthermore, results summarized in Table 1.6 that mean value of domain in Survival Reading Skills is to be found insignificant for Pre test session $M=4.00$ ($SD=.92$) after the exposure period the value of Post-test session is $M=4.48$ ($SD=0.97$), this shows there is no significant difference and the 't' value is $1.43(p>.05)$. It shows that now the group is able to response much well in Survival Reading skills after application of Computer Assisted Instructions. Findings suggested that both the sessions have insignificant mean difference, it means Computer Assisted Instructions have less effect on Reading skills.

A look over Table 1.7 reveals that on the domain area Reading (Hindi Language), group has obtained a Mean of $M=37.00$ ($SD=7.96$) for Pretest session whereas for Post-test session mean is $M=44.86$ ($SD=6.03$). It highlights that significant difference is reported between both the sessions ($t=6.69, p<.01$). On the basis of above significant difference, it can be said that the group is able to response much more correct way after their exposure to Computer Assisted Instructions. Development of reading skills has affected not only in academic subject Hindi like Hindi Alphabets (*Barakhadi*), Use of *Mantras*, differentiation between consonants and vowels, writing down small and simple sentences but also widened language acquisition, general knowledge, vocabulary, and even social acceptance of mild intellectually disabled children.

Findings of Table 1.8 is based on position in Writing domain (Pre-Writing) in the experimental group has scored a mean of 37.93 ($SD=4.84$) for pre-test session and after inclusion in general school, mean was 43.46 ($SD=3.88$) for the post-test session which shows that there is a

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significant difference between both the sessions. The calculated paired sample 't' value obtained significant ($t=3.15, p<.01$) which present that the group has shown significant improvement in the Prewriting skill area. Children of experimental group have enhanced their skills very promptly in three words writing, can cut on the straight line easily and not beyond the mentioned area.

It is interesting to observe in Table 1.9 that in the skill area of Writing (Hand-Writing) effect of Computer Assisted Instructions is to be found insignificant. 't' value reported quite insignificant ($t=1.72, p>.05$). The mean scores of both the sessions i.e. Pre Test and Post Test are $M=25.13$ ($SD=6.42$) and $M=25.80$ ($SD=6.71$) respectively. This insignificant difference indicates that the Handwriting skills are much less improved through Computer Assisted Instructions.

Furthermore, evaluation of Domain Math (Numerical Concepts) represented in Table 1.10, which also highlights that there is a significant difference between Pre Test and Post Test scores of mentally challenged children. Significant 't' value is reported ($t=14.47, p<.01$) for Numerical Concept area. Mean scores obtained by both the session i.e. Pre-Test and Post-test are $M=42.26$ ($SD=15.48$) and $M=122.53$ ($SD=16.93$) respectively. After the period of exposure, intellectually disabled children have enhanced their concepts in numeric like counting objects, putting objects in horizontal and vertical lines, matching the number of objects in flashcards with real like objects.

Table 1.11 displays significant difference ($t=8.10, p<.01$) between Pre-Test and Post-Test scores of experimental group on Math (Time) skill area. It can clearly be observed that for Pre-session mean was $M=26.00$ with SD of 5.83 but after the application of inclusion strategies it raised to $M=37.66$ with SD of 1.79. Children were found rapid development in time skills. This significant improvement suggests that Computer Assisted Instructions can enhance improvement in Math (Time) related skills.

Table 1.12 represents the domain Math (Money) skill. Before the test administered the score of Pre-Test was 42.46 ($SD=4.05$) whereas after the application of inclusive strategies training given the post-test session was done and the mean of Post session found $M=43.33$ ($SD=4.43$), which indicate the significant difference among them and 't' test is reported significant ($t=1.42, p>.05$). It pretends that now the group has shown little bit change in their Math (Money) related skills after the application of Computer Assisted Instructions.

It is obvious from above-stated Table 1.13 that the group has shown the slight change between Pre Test and Post Test scores i.e. $M=26.13$ ($SD=6.67$) and $M=27.00$ ($SD=6.36$) respectively, which clearly shows the significant difference between before and after scores. Calculated 't' test is ($t=1.46, p>.05$). Above findings indicated that mentally challenged children have less

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improved their skill in domain Math (Measurement) after the application of Computer Assisted Instructions.

Table: 2 Showing Mean, SD and ‘t’ values between pre & post test scores of control group for various academic areas

Measure	Group	N	Mean	SD	‘t’	Sig. Level
Auditory	Pre-test	13	7.71	2.36	1.73	NS
	Post-test	13	8.57	2.87		
Visual Perception	Pre-test	13	16.92	2.61	1.47	NS
	Post-test	13	17.07	2.81		
Word Recognition	Pre-test	13	4.85	.77	0.36	NS
	Post-test	13	4.92	.99		
Phonetics	Pre-test	13	16.64	1.69	1.46	NS
	Post-test	13	16.78	1.71		
Reading Comprehension	Pre-test	13	6.07	1.54	1.48	NS
	Post-test	13	6.21	1.57		
Reading Skills	Pre-test	13	4.21	.89	1.88	NS
	Post-test	13	4.42	1.01		
Reading Hindi	Pre-test	13	38.28	8.11	0.69	NS
	Post-test	13	38.42	8.33		
Pre-Writing	Pre-test	13	36.28	3.75	1.47	NS
	Post-test	13	36.42	3.73		
Hand-Writing	Pre-test	13	25.21	5.84	1.87	NS
	Post-test	13	25.42	5.68		
Numerical Concepts	Pre-test	13	96.28	16.98	1.00	NS
	Post-test	13	96.57	17.23		
Time	Pre-test	13	33.35	4.58	1.14	NS
	Post-test	13	33.57	4.39		
Money	Pre-test	13	37.21	1.84	1.41	NS
	Post-test	13	38.21	3.82		
Measurement	Pre-test	13	15.93	1.65	0.96	NS
	Post-test	13	16.65	3.58		

Furthermore, findings can be analyzed from Table no. 2.1 to 2.13 that insignificant mean differences are to be reported among all the academic areas of intellectually disabled children for control group like Reading readiness skills (Auditory) of. ‘t’ value is also to be found insignificant. ($t = 1.73, p > .05$), Reading Readiness -Visual Perception ($t = 1.47, p > .05$), Reading-Word Recognition skills ($t = 0.36, p > .05$), Reading (Phonetics) skills, ($t = 1.46, p > .05$), Reading (Comprehension) skills ($t = 1.48, p > .05$), for Reading (Reading Skills) ‘t’ ratio is 1.88 ($p > .05$), Reading -Reading Hindi ($t = .69, p > .05$), Writing domain -Pre-Writing ($t = 1.47, p > .05$), Writing -Hand-Writing ($t = 1.87, p > .05$), Math -Numerical Concepts ($t = 1.00, p > .05$),

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Math (Time) skill ($t=1.14$, $p>.05$), Math (Money) skill ($t=1.41$, $p>.05$) and Math (Measurement) skill ($t=.96$, $p>.05$)

On the basis of above findings, one can well imagine that control group scored by and large similar mean scores in their pre and post assessment. It means exposure to regular teaching methods (non-instructional) is less effective as compared to Computer Assisted Instructions. Reading skills have not enhanced much in academic subject Hindi. The group does not display effectively widened language acquisition, general knowledge, vocabulary, and social acceptance of children with mild intellectual disabilities.

CONCLUSION

The results of paired sample 't' test for experimental group on dimensions of academic skills reveals that exposure of Computer Assisted Instructions had the significant impact on the most of the dimensions of academic skills of intellectually disabled children. Therefore, *Hal (Presentation of Computer Assisted Instructions will help to improve the academic performance of mild intellectually disabled children.)* is moderately accepted and moderately rejected. It is accepted with reference to dimensions like Auditory, Visual Perception, Word Recognitions, Phonetics, Reading (Hindi), Pre-Writing Skills, Numerical Concepts and Time whereas it is rejected for Academic Achievement areas like Reading Comprehensions, Reading Skills, Handwriting, Money and Measurement. The group taught with the help of computer-assisted instructions produced significantly greater remediation of Auditory, Visual perception, Word recognition, Phonetics, Reading (Hindi), Pre-writing, Numerical concepts and Time-related skills as compared to the group taught through the conventional method of classroom teaching. It may be concluded that attraction of computer screen, different attractive colours and figures motivated mild intellectually disabled children to maintain their interest in the academics. It can be said that it is possible only because of the attractiveness of the task and its presentation on the electronic screen. It seems that it improves the memory of the mentally challenged child through queues. Researchers had already shown in the field of memory that cue selection is a major contributor in the enhancement of memorizing skills. Another reason can be concluded for their academic improvement of the child is a rapid change in the figure and colour of the task, which is generally not happened in the conventional academic curriculum. It is reported and several other researchers examined the effectiveness of CAI in various environments concluded that it was as effective as other methods of instruction (Christmann, Badgett, & Lucking, 1997; Mann, Shakeshaft, Becker, & Kottkamp, 1999; Watkins, 1991).

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Burns, M. K., Kanive, R., & DeGrande, M. (2012). Effect of a computer-delivered math fact intervention as a supplemental intervention for math in third and fourth grades. *Remedial and Special Education, 33*, 184-191. doi: 10.1177/0741932510381652
- Christmann, E., Badgett, J., & Lucking, R. (1997). Progressive comparison of the effects of computer-assisted instruction on the academic achievement of secondary students. *Journal of Research on Computing in Education, 33*(4), 325- 337.
- Dowd, S.B., and Bower, R., (2010). Computer-Based Instruction Teaching Techniques. (Retrieved from [https://www.asrt.org/media /Pdf/Foreducatiors/3InstructionalTools/3.5 Computer.pdf](https://www.asrt.org/media/Pdf/Foreducatiors/3InstructionalTools/3.5Computer.pdf))
- Lal, R., Gupta, A., & Lobo, G. (2012). *Educational Assessment Checklist for Children with Intellectual Disabilities (EACCID)*, Prasad Psycho Corporation, New Delhi.
- Hasselbring, T. S., Goin, L. I., & Bransford, J. (1988). Developing math automaticity in learning handicapped children: The role of computerized drill and practice. *Focus on Exceptional Children, 20*, 1-7.
- Lindsay, G. (2007). *Educational psychology and the effectiveness on inclusive education/mainstreaming*. *British Journal of Educational psychology, 77*, 1-24.
- Mann, D., Shakeshaft, C., Becker, J., & Kottkamp, R. (1999). *West Virginia's Basic Skills/Computer Education Program: An analysis of student achievement*. Santa Monica, CA: Milken Family Foundation.
- Ministry of Human Resource Development, Government of India, (1997). *A Report on Elementary Education*, Saikia Committee Report, New Delhi.
- National Council of Teachers of Mathematics. (1989). *Curriculum and evaluation standards for school mathematics*. Reston, VA: National Council of Teachers of Mathematics.
- Watkins, J. (1991). Long-term effects of an integrated microcomputer project on subsequent science and mathematics achievement in Arkansas schools. (Doctoral dissertation, University of Arkansas, 1991). *Dissertation Abstracts International, 52*(08), 2880A.

Personality Factors of Drug and Non-Drug Abusers in Kashmiri Youth

Irfan Ahmed Wani^{1*}, Dr. Bhupinder Singh²

ABSTRACT

The present study is an attempt to investigate the differences between personality dimensions of Drug and Non-Drug Abusers of Kashmiri Youth. The study was conducted on a sample of 100 male respondents; of these 50 were Drug Abusers and 50 Non-Drug Abusers. The Eysenck's Personality Questionnaire Revised (EPQ- R) was used to assess their personality traits. The results revealed that the two groups significantly differed on Psychoticism, Extraversion and Neuroticism dimensions of Eysenck's Personality scale. Thus, it is concluded that the personality traits do influence drug abuse behavior and it is suggested that mental health professionals should give due importance to the personality traits of drug abusers in formulating therapeutic plans for drug de-addiction.

Keywords: *Drug abuse, Personality traits*

The notion that an individual's pattern of drug use is based, in part, on personality characteristics and/or psychopathology has received some clinical acceptance (Mattoo, et.al 2001). Personality traits have also been implicated in the etiology of drug addiction, Adolescents who score high on negative emotionality, a trait akin to neuroticism, or low on constraint, a trait akin to conscientiousness, are at greater risk of developing a substance dependence disorder by age 20 (Elkins et al., 2006). The availability of drugs in the neighborhood, social norms, and low socio-economic status (SES) increase the likelihood of drug use (Degenhardt & Hall, 2012). The relationship between narcotic substance abuse disorders and personality disorders, means whatever the person take disorders of abnormal issues in terms of personality, his consumption of narcotic drug will be high (Timoty, 2000). There is a correlation between personality features and drug addiction and addicts suffer from mental disorders and disturbances (Heydari Pahlavian, 2003). Many psychological and social reasons explained the attraction of addictive behavior such as adverse experiences during childhood, mental illness, discord, violence, stressful family life, peer pressure and psychological complications (Khan & Salman, 2003).

¹ Research Scholar Department of Psychology Barkatullah University Bhopal, India

² Professor Department of Psychology Barkatullah University Bhopal, India

*Responding Author

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Personality characteristics such as aggression, maladjustment, being anti-social, psychopaths, lack of social interest, disregard for social customs, irresponsibility, personality disorder, lack of attention to social rules can lead to increased crime, delinquency, violence, murder and etc. All these factors create chaos in society (Ajil, 2010). The relationship between Five-Factor model domains and substance-related behavior found that neuroticism and conscientiousness were linked to substance-related behavior; however the dimensions of extraversion and agreeableness were not associated with addictive behavior (Ruiz et.al, 2003). Eysenck and Eysenck, (1975) in their writings expressed that only three traits like extraversion, neuroticism and Psychoticism are enough to explain the personality of individuals. Looking into the importance of personality traits in relation to drug abuse, the present study was conducted to assess the personality differences between drug abusers and non-drug abusers in Kashmiri youth.

Objective

1. The primary objective of the research was to study the personality dimensions between Drug Abusers and Non-Drug Abusers of Kashmiri Youth.

Hypothesis

2. There would be significant difference between Drug Abusers and Non-Drug Abusers with regard to their personality dimensions, i.e., Psychoticism, Extraversion, and Neuroticism.

METHODOLOGY

Sample

The sample consisted of 100 respondents. Of these 50 were Drug Abusers and the other 50 were Non-Drug Abusers. The age of the respondents ranged between 16 - 24 years. The Drug Abusers were selected from Drug De-addiction and Rehabilitation Center Police Control Room, Srinagar Kashmir, where as Non-Drug abusers were selected from various high schools and colleges of Kashmir. Only males were taken for the study.

Tools

Eysenck Personality Questionnaire Revised (EPQ-R): The EPQ-R constructed by Eysenck and Eysenck (1975) was used. It consists of 90 items, with each two alternative answers Yes, No designed to assess the personality traits of Psychoticism, Neuroticism, and Extraversion. A Lie scale also is included in the instrument to measure dissimulation. Responses to one item from the EPQ-P scale ("would you take drugs which may have strange or dangerous effects?") were not considered during scoring because this question inquires directly about drug use. The test-retest reliability of the scale was between .80 to .90.

Personality Factors of Drug and Non-Drug Abusers in Kashmiri Youth

Procedure

Each subject was tested individually. They were briefed about the purpose of the study in detail. They were assured about that all information would be kept confidential. Necessary explanation was provided to the respondents to make the questionnaire easier and understandable.

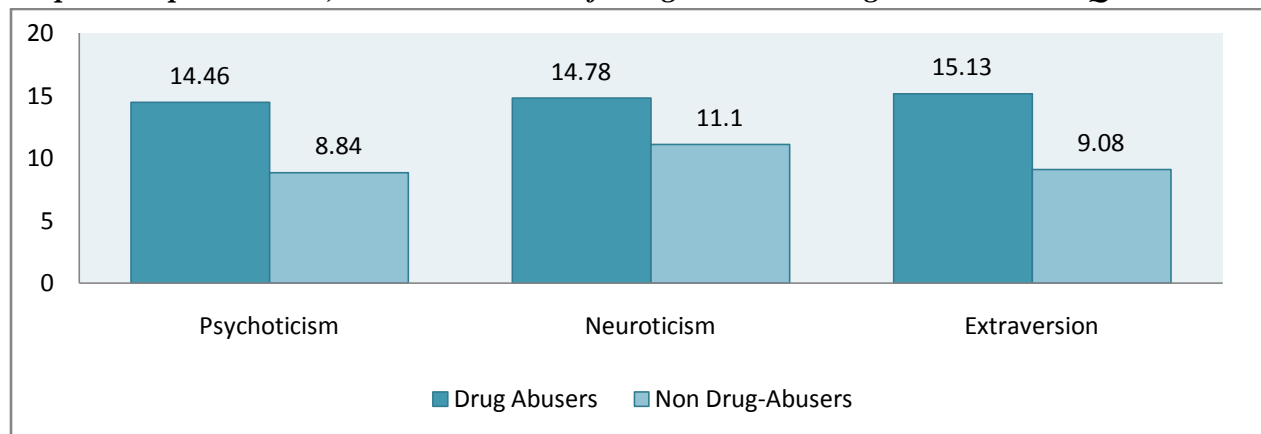
RESULTS

Table 1: Means, SDs and t- values of Drug and Non- Drug Abusers on EPQ- R Scale.

Personality Dimensions	Drug abusers N=50		Non- drug abusers N=50		t-value
	M	SD	M	SD	
Psychoticism	14.46	6.45	8.84	4.27	5.15**
Neuroticism	14.78	3.10	11.1	3.80	5.33**
Extraversion	15.13	4.15	9.08	3.98	4.17**

*** $p < 0.01$

Graph 1: Depicts Means, SDs and t-values of Drug and Non-Drug Abusers on EPQ-Scale.



DISCUSSION

The results of the present study revealed that the Drug and Non -Drug Abusers of Kashmiri youth significantly differed on all the dimensions of Eysenck's Personality Questionnaire i.e., Psychoticism, Neuroticism, and Extraversion. In context of Psychoticism the mean was found to be 14.46 in Drug Abusers and 8.84 in Non- Drug Abusers. It was concluded that there is significant difference found between Drug and Non- Drug Abusers for Psychoticism dimension indicating higher Psychoticism trait in Drug Abusers in comparison with Non- Drug Abusers. In context of Neuroticism, the mean of data collected was found to be 14.78 in Drug Abusers and 11.1 in Non- Drug Abusers, thus showing significant difference between Drug and Non- Drug Abusers for the Neuroticism trait.

Personality Factors of Drug and Non-Drug Abusers in Kashmiri Youth

These findings are in line with the earlier researches that have also reported higher scores on Neuroticism and Psychoticism traits for drug abusers than the non-drug abusers (Charu et.al 2010; Cohen et.al 2004). Neuroticism reflects level of emotional adjustment and instability. Individuals high on Neuroticism trait are associated with irrational ideas, reduced impulse control, and poor management of stress (Costa & McCrae, 1992). In context of Extraversion dimension the mean of data was found to be 15.13 in drug abusers and 9.08 in Non- drug abusers thus, showing significant difference found between Drug and Non drug Abusers for extraversion. The results revealed that the trait of Extraversion is higher in Drug Abusers in comparison with Non- Drug Abusers. Research in the past have also found important personality differences between Drug Abusers and Non-Drug Abusers in the context of Extraversion dimension and reported drug abusers to be more assertive, excitement seekers and group oriented as compared to non-substance abusers (Sher et.al, 2000). Extraversion is primarily an interpersonal dimension and has been associated with activity, sociability, risk-taking behavior and impulsivity (Costa & McCrae, 1992). Drug use and abuse are strongly discouraged by conventional cultural standards risky activities because of their illicit nature. Thus, it is concluded that the personalities of drug and non-drug abusers differ significantly and the mental health professionals should give due consideration in assessing the personality profiles of drug abusers and in formulating de-addiction plans for them.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Ahmad, H. P. (2003). Comparison of personality traits of drug addicts with non- addicted people. Hamedan, University of Medical Sciences.
- Ajil chi, B. (2010). The relationship between personality traits of addicted women and social order, General psychology, p.hd Thesis, Tehran: Islamic Azad University, Science and Research.
- Cohen, N. L. Ross, E. C. Bagbay, M. R. Parvolden, P., & Kennedy, S. H. (2004). The five factor model of personality and antidepressant medication compliance. The Canadian Journal of Psychiatry, 49, 106-113.
- Costa, P., & McCrae, R. (1992). Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) Odessa, FL: Psychological Assessment Resources.
- Degenhardt, L., & Hall, W. (2012). Extent of illicit drug use dependence and their contribution to the global burden of disease. Lancet, 379, 55-57.

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- Dubey, C. Arora . M. Gupta, S., & Kumar, B. (2010). Five Factor Correlates: A comparison of substance abusers and non - substance abusers. *Journal of the Indian Academy of Applied psychology*. 36, 107-11.
- Eysenck, H. J., & Eysenck, S. B. G. 1975). *Manual of the Eysenck Personality Questionnaire*, San Diego: Educational and Industrial Testing Service.
- Khan, W. & Salman. (2003). Personality profile of drug addicts and normals. *Journal of Personality and Clinical studies* , 19, 23-24.
- Mattoo, S. K. Varma, V. K. Singh, R. A. Khurana, H. Kaur, R., & Sharma, S. K. (2001). Alienation, sensation seeking and multiphasic personality questionnaire, profile in men being treated for alcohol and/or opioid dependence. *Indian Journal of Psychiatry*, 43, 317-326.
- Ruiz, M. A. Pincus, A. L., & Dickinson, K. A. (2003). NEO-PI-R predictors of alcohol use and alcohol-related problems. *Journal of Personality Assessment* , 3, 226-236.
- Sher, K. J. Bartholow, B. D., & Wood, M. D. (2000) Personality and substance use disorders: A prospective study. *Journal of Consulting and Clinical Psychology*, 68, 818-829.
- Tamir, M. & Robinson, M. (2004). Knowing good from bad: The paradox of neuroticism negative affect and evaluating processing. *Journal of Personality and Social Psychology* , 87, 913-925.
- Timothy, Y. (2000). *Borderline Personality Disorder and Substance Use Disorders: A Review And Integration*, Colombia: University Of Missouri.

Inclusive Education in India

Dr. Aruna^{1*}, Kuldeep Singh², Mangi Lal³

ABSTRACT

Near about 10% of the world's population is affected with a disability, and a large amount of these people live in developing countries. The facilities and services available for these people have a wide difference between developed and developing countries. One of basic need and services for these people is education. The International Community, especially after the UN Convention on People with Disabilities, is becoming increasingly aware of the different forms and models of special education. The three basic models i.e. segregated, integrated and inclusive special education, have been differentiated between by international and local agencies included Government and NGOs, and an overwhelming support is being shown by human rights activists, non-profit organizations, government organizations, and different agencies, which are all in favor of inclusive special education as the most beneficial type of education for people of all ability levels. The Government of India has started numerous plans and policies in the field of special education after the independence but their implementation efforts have neither resulted in an inclusive system of education, nor have they reached their goal of "education for all" across the country. The Government of India needs to bridge the gaps in their education system to build a strong system of inclusive education in India.

Keywords: *Inclusive, Education, India*

Regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all, moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system.

- (The Salamanca Statement and Framework of Action on Special Needs Education)

Inclusive education "is a process of strengthening the capacity of the education system to reach out to all learners." It involves restructuring the culture, policies and practices in schools so that

¹ Assistant Professor, Department of Psychology, FGM Govt. College, Adampur, India

² Research Scholar, Department of Psychology, J. N. Vyas University, Jodhpur, Raj., India

³ Research Scholar, Department of Psychology, J. N. Vyas University, Jodhpur, Raj., India

*Responding Author

they can respond to the diversity of students in their locality. For a school to be inclusive, the attitudes of everyone in the school, including administrators, teachers, and other students, are positive towards students with disabilities. Inclusive education means that all children, regardless of their ability level, are included in a mainstream classroom, or in the most appropriate or least restrictive environment (LRE), that students of all ability levels are taught as equals, and that teachers must adjust their curriculum and teaching methodologies so that all students benefit. This also avoids wasting resources, and “shattered hopes, which often occurs in classrooms that are “one size fits all. Studies have shown that systems that are truly inclusive reduce drop-out rates and repetition of grades, and have higher average levels of achievement, compared to systems that are not inclusive. People who believe in inclusive education believe that the education system is the impediment to learning for a child, and that every child is capable of learning!

THE IDEOLOGICAL FRAMEWORK: SPECIAL EDUCATION IN INDIA

It is important to comprehend the framework in which special education policy was created and continuously emerges out of in India. Although the beliefs and sentiments of an entire country can never be generalized, there are critical structural, historical, and religious facts that are important to know shape the course of special education and inclusion in India. India was colonized by Britain between 1857 and 1947, and their first constitution was created in 1950. It is important to remember that India has only been a republic for 66 years, which is extremely young for a country. There is a history of colonialism, discussed further below, which affects it to this day.

Adding to the legacy of colonialism, 80% of India’s population lives on less than about R100, or two dollars a day. Even when adjusting for purchasing power parity, this amount puts hundreds of millions of people below the global poverty line. Then, people with disabilities need to account for the “conversion handicap,” a term coined by Amartya Sen. The conversion handicap is when people with disabilities derive a lower level of welfare from a given level of income than the rest of the population, due to additional costs incurred in converting income into well-being. The validity of this theory can be discussed at a different time, but for the purposes of this paper, it will serve to make the point that people with disabilities may have extra expenses. From the perspective of the medical model, their extra expenses would come from their disability. From the perspective of the social model, their extra expenses would come from society’s lack of accommodation of their disability.

HISTORY OF SPECIAL EDUCATION POLICY AND INCLUSION IN INDIA

Pre-Independence

1909 marks the first piece of attempted legislation regarding inclusion and education in India. Gopal Krishna Gokhale, “professor of English literature, mathematics, and political economy, served, for example, on the Poona Municipal Council, the Bombay Legislative Council, and

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finally, the Imperial Legislative Council, “introduced a bill under the Indian council act of 1909 to make primary education compulsory.” This bill, if it passed, would have provided funding for compulsory education for all. However, it was voted down.

The policies and actions by the government of India regarding inclusive special education in the 1940s contradicted each other entirely. The Sargent Report by the Central Advisory Board of Education in 1944 suggested children with disabilities should be entirely mainstreamed¹. Rather than debating the validity of inclusion, the Sargent Report stated that it was the only way to provide an education. Yet both the action and lack of action by the government of India in the 1940s completely contradicted this suggestion. Throughout the 1940s, the government of India began setting up segregated workshops and trade schools separate from those for students without disabilities to teach children with disabilities skills to enter the workforce. In addition, this decade was marked by a large increase in the amount of money given to voluntary organizations to establish special schools. Most of these segregated schools were expensive and located in urban areas, further marginalizing people with disabilities in rural areas.

Post-Independence

After independence, there have been many policies and practices made for inclusion in education in India. Some of major policies are as under-

1. The inclusive education is written into India’s constitution as a fundamental right for all citizens. Part IX, Article 45 of the Constitution states, the state shall endeavor to provide, within a period of ten years from the commencement of this constitution, for free and compulsory education for all children until they complete the age of fourteen years.
2. The significance of Article 45 was reaffirmed in 1993 with the Supreme Court’s Unnikrishnan judgment. In this case, the court ruled that Article 45 must be read in conjunction with Article 21 of the constitution, which states that “No person shall be deprived of his life or personal liberty except according to procedure established by law.”
3. The 86th amendment to the constitution, section 21A reads, “The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine.
4. The 1960s marked an important change in how special education was organized and funded in India. The Ministry of Education split, and a new branch called the Ministry of Social Welfare was created. The Ministry of Social Welfare was given the responsibility for the “weak and vulnerable” sections of society. They largely focused on rehabilitation, and not as much on education. Instead of supporting the current education system, the Ministry of Social Welfare began giving out grants to nonprofits that provided education for children with disabilities, inadvertently preventing inclusion of these children within the public or mainstream sector.

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5. The Government of India created the Kothari Commission in 1964, named after its chairman, P.S. Kothari. This commission was created because the Government of India wanted to create a plan of action to improve the education system. The plan of action created by the Kothari Commission included people with disabilities, but unfortunately, the Government of India never implemented it. It reads, we now turn to the education of handicapped children. Their education has to be organized not merely on humanitarian grounds of utility. Proper education generally enables a handicapped child to overcome largely his or her handicap and make him into a useful citizen. Social justice also demands it...on an overall view of the problem, however, we feel that experimentation with integrated programmes is urgently required and every attempt should be made to bring in as many children in integrated programs.
6. The Ministry of Welfare created the Integrated Education of Disabled Children Scheme (IEDC), not to be confused with the Integrated Child Development Scheme in 1974. The program provided children with disabilities “financial support for books, school uniforms, transportation, special equipment and aids,” with the intention of using these aids to include children in mainstream classrooms.
7. The National Policy on Education (NPE) was created in 1986. Continuing in the spirit of the 1974 IEDC, the NPE states that children with “mild” disabilities should be included in mainstream classrooms, whereas children with “moderate to severe” disabilities should be placed in segregated schools. The 1992 Program of Action (POA), created to implement the 1986 NPE, broadens the NPEs definition of who should be included in mainstream schooling, that “a child with a disability who can be educated in the general school should not be in the special school.” It says that once children with disabilities acquire basic living skills, which would be learned in resource rooms or special schools, that they should be mainstreamed.
8. The year 1992 was also the year of the Rehabilitation Council of India (RCI) Act. The RCI Act provided standards for rehabilitation professionals; one type of rehabilitation professional being special education teachers. This act is important because it establishes consequences for teaching without a license. Teachers without a license could face imprisonment for up to one year, be fined R1000, or both.
9. In 2002 the 86th amendment to the constitution was made, mandating free and compulsory education to all children ages 6-14. And with the help of World Bank, Government of India Initiated Sarva Shiksha abhiyan-SSA (Education for All) in India.
10. The Government of India decided to make Amendment 21A of the constitution, giving children between the ages of 6-14 the right to a free, appropriate and compulsory education, into an act. In 2005, the Right to Education Act was drafted by the Ministry of Human Resource Development. This bill, framed through a “social justice and collective advocacy perspective” rather than through a framework of individual rights, is not disability-specific, but is inclusive of children with disabilities, with specific sections that

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address the educational rights of students with disabilities. The Right to Education Act was passed in 2009 and put into full effect in 2010.

11. It was extremely important that India create a bill around section 45 and 21 (A) of the constitution, which became the Right to Education Act which was originally floated in 2005. However, in the same year, the Ministry of Human Resource Development also drafted the Action Plan for Inclusion in Education of Children and Youth with Disabilities (IECYD). This action plan envisions that all children with a disability will have access to mainstream education; in order to facilitate this, the government, specifically collaborating between the Rehabilitation Council and the National Council for Teacher's Education, will ensure that there are adequate numbers of teachers trained in inclusive education, as well as the proper physical and ideological infrastructure to facilitate inclusion in schools. The plan specifically looks to move from integration towards inclusion, stating, whereas under the Scheme of Integrated Education for the Disabled Children (IEDC) as it stands at present, children with disabilities are placed in a regular school without making any changes in the school to accommodate and support diverse needs, the revised IECYD will, in contrast, modify the existing physical infrastructures and teaching methodologies to meet the needs of all children, including Children with Special Needs.
12. In 2008, the government reformed the Scheme of Integrated Education for Disabled Children (IEDC) and created the Inclusive Education of the Disabled at the Secondary Stage (IEDSS). It went into effect on April 1st, 2009. IEDC was reformed to take into account the resources provided for students with disabilities ages 6-14 under Sarva Shiksha Abhiyan. The objective of IEDSS is to enable the disabled children who have completed eight years of elementary education to continue their education at the secondary stage in an inclusive environment in regular schools. IEDSS provides students with disabilities ages 14-18, studying in public or government-funded schools, R3000 per school year from the central government to purchase the necessary materials to use to ensure inclusion of the student in the mainstream school system. This is the first policy that specifically acknowledges the importance of secondary education for persons with disabilities.
13. The most recent policy specifically concerning education and people with disabilities is the Ministry of Social Justice and Empowerment's National Policy for People with Disabilities. Although this policy was created in 2006, after the 2005 Action Plan, and the two policies were created under separate ministries, they are very similar in both the ideologies that they were founded on, as well as the actual changes they are trying to make to the system. The National Policy for People with Disabilities utilizes Sarva Shiksha Abhiyan (in English, Education for All), also created by the Ministry of Social Justice and Empowerment, as their main mode of implementation of the policy. This policy echoes the 2005 plan of action and 2005 (made official in 2009) bill by changing special schools in resource centers for people with disabilities and teachers. In addition, the policy seeks to bridge the gap between rural and urban areas by creating more District Disability and Rehabilitation Centers (DDRCs), which disseminate information in terms of availability of

aids and appliances, ensure the mandated 3% coverage of persons with disabilities in poverty reduction programs and target girls with disabilities.

FACTS AND FIGURES OF INCLUSIVE EDUCATION IN INDIA

Statistics on disability in India vary widely, and accuracy of statistics is always questionable. However, almost all of the statistics available point to the gaps in the education system, the marginalization of children with disabilities, and the need of the Government of India to step up their efforts to reach their goal of “education for all.” The Government of India (GoI) did its first and only national survey to date on the population of people with a disability, from July-December, 2002. In December 2003, one year later, Report No. 485, the 593 page Disabled Persons in India was published in conjunction by the National Sample Survey Organization, Ministry of Statistics and Program Implementation, and the Government of India. Although statistics vary across the board, depending on the year, surveyors, methods used, and other extraneous factors, this survey is considered most legitimate and accurate by governments and organizations across the globe. The Ministry found that there were 18.49 million people with disabilities in India, or about 1.8% of the population. Data from the World Bank differs in both the ages of the sample group and the statistics, but draws a dramatically different picture. According to the World Bank, 38% of children with disabilities ages 6-13 are not in school. In addition, starkly contrasting with Kalyanpur’s interpretation of the National Census, the World Bank states that 70% of children with disabilities ages 5-20 have attended a school at some point in their life, and that 90% of these children have attended a mainstream school. This data is further supported by data from the National Census, which states that of the children with disabilities in school in 2002, 94.8% of these children attend a mainstream school, and only 5.2% of children with a disability attend a special school. It is important to emphasize that these statistics do not include all of the children with a disability out-of-school, but only those that were attending school in 2002. Therefore, a large percentage of the population is still not receiving any type of schooling. Alarming, the World Bank states that almost all children with disabilities do not continue their education past primary school.

There are several areas across which people with disabilities receive unequal services in India. One of those is the difference between urban and rural areas and the services available in both. 75% of people with disabilities live in rural areas in India. This is an overwhelming majority. The number becomes worrisome in comparison to where the majority of services are offered; which is in urban areas. Less than 15% of national services for people with disabilities are located in rural areas, and of those, most are expensive and/or private. The discrepancy in services is directly reflected in educational achievement and enrollment in schools. Drawing data from The National Census, states, “In terms of educational levels, only 11% of children with disabilities between the ages of 5–18 years in urban areas (less than 1% in rural areas) were enrolled in special schools, while 55% of adults with disabilities were illiterate (59% in rural and

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40% in urban areas), with only 7% in rural and 18% in urban areas having completed secondary education.

Another area of inequity between persons with disabilities is gender. The Government of India National Census pointed out the extreme inequities between girls and boys with a disability. In number, there are fewer girls than boys with a disability.

People with disabilities in India are also discriminated against based on their type of disability. The National Census did not break down types of disability according to the Diagnostic and Statistical Manual of Mental Disorders IV (DSM IV) or a similar text, but rather, by the categories “locomotor, multiple, mental retardation (intellectual disability), mental illness, blindness, low vision, hearing and speech.

CONCLUSION

The policies of the new millennium are the most inclusive of those to date. But, just as the policies of the past, will these policies remain words on paper? The Government of India has fallen short of their goal for all of the policies of the past 66 years. Yet in the past decade, there have been several promising pieces of legislation and schemes: 2005 Action Plan for Children and Youth with Disabilities, the 2006 National Policy for People with Disabilities, the 2008 Inclusive Education of the Disabled at Secondary Stage (IEDSS) and the 2009 Right to Education Act-as well as continuing with the Sarva Shiksha Abhiyan scheme. So is there a lack of political will that is preventing full implementation of policies, or lack of governmental resources and capacity? It seems to be a combination of both.

To enable an inclusive system of education, the Government of India needs to consolidate the responsibility for education under the Ministry of Education, and abolish the responsibility of the Ministry of Social Justice and Empowerment. Although the 2006 National Policy for People with Disabilities mandated the change of special schools into various types of resource centers, Sarva Shiksha Abhiyan states that people with disabilities should be educated in the least restrictive environment, which could potentially be a special school. Therefore, this scheme and this policy actually contradict each other. The Ministry of Social Justice and Empowerment could still support students with disabilities by continuing to provide grants for these resource centers, but ultimately, it is imperative for inclusion that students of all ability levels are receiving services under the same ministry. This directly relates to the definition of inclusion and the social model defined above, because the Ministry of Education will have to adjust to accommodate people of all ability levels, including everyone.

Accountability of the Government of India and its implementing partners is imperative for ensuring successful implementation of policy. One of the best ways to do this is to ensure that citizens are well informed about these policies and schemes.

A system of reliable monitoring is imperative for evaluating the success or failures of a policy or scheme.

Training teachers in teaching methods that include students of all ability levels, as well as spreading awareness to teachers about the importance and benefits of inclusion, is one of the most important parts of implementing a system of inclusive education, because the teachers are the people on-the-ground who are going to accommodate the students.

Building accessibility is absolutely imperative for students with disabilities to be included as an equal member in their school. But what is typically more challenging for mainstream schools who are trying to become inclusive is converting their curriculum to fit students of all ability levels.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Fact Sheet on Persons with Disabilities, UN Enable, The United Nations. <<http://www.un.org/disabilities/documents/toolaction/pwdfs.pdf>>.
- Hegarty, Seamus, and Mithu Alur, Education and Children with Special Needs: From Segregation to Inclusion, Thousand Oaks, Calif: Sage Publications, 2002, 56
- Kalyanpur, Maya., "Equality, Quality and Quantity: Challenges in Inclusive Education Policy and Service Provision in India.," International Journal of Inclusive Education. 12.3 (2008): 244
- People with Disabilities in India: from Commitments to Outcomes," The World Bank Human Development Unit, South Asia Region, July 2009, <http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2009/09/02/000334955_20090902041543/Rendered/PDF/502090WP0Peopl1Box0342042B01PUBLIC1.pdf>.
- People with Disabilities in India: from Commitments to Outcomes," The World Bank Human Development Unit, South Asia Region, July 2009, Web. 25 September 2011.
- Policy guidelines on Inclusion in Education, UNESCO, The United Nations, 2009, web. <<http://unesdoc.unesco.org/images/0017/001778/177849e.pdf>>.
- Sharma, Umesh and Deppeler, Joanne, "Integrated Education in India: Challenges and Prospects," DisabilityStudies Quarterly, 25.1 (2005), Society for Disability Studies, Web. 13 February, 2012, <<http://dsqds.org/article/view/524/701>>.

Inclusive Education in India

The Salamanca Statement and Framework for Action on Special Needs Education, UNESCO,
The United Nations, 10 June 2012,
<http://www.unesco.org/education/pdf/SALAMA_E.PDF>.

Comparison of PVQ between Extrovert Rural and Urban Females

Sanjay K. Das^{1*}, Shobha Gupta², Maduri Datta³

ABSTRACT

The objective of the present study was to compare the personal values between extrovert rural and extrovert urban females. PVQ is taken as a set of dependent variable whereas extrovert traits of personality and rural and urban fields are taken as set of independent variables. It was hypothesized that females of urban and rural area will differ on their mean for value pattern. This assumption is based on findings of Bhatia et al. (2007) and Devi and Vig. (2014). A sample of 360 females from urban area and females of similar number from rural area were selected with the help of random sampling technique. Results indicate that urban females (extrovert) do not believe in social inequality, however, rural adolescents gave more value to family prestige than urban adolescents. Rural adolescents believed in maintenance of purity of family blood by avoiding inter-caste marriages.

Keywords: *Personal Values, Personality, Extrovert, Introvert*

Values are meaningful beliefs. Personal Values are people's internal conception of what is right, beneficial, important and useful. They are important because they reflect in the way one lives, work and function. They help individual determine his priorities and evaluate their achievements or failure. Values are like rails that keep a train on the track and help it move smoothly, quickly and with direction. It brings quality to life. Generally, whatever helps one in achievement of the desired result or satisfy his or her desire and needs, is considered as value.

Values are necessary for satisfying our own needs. One has various needs like financial, security emotional, have etc. Luckily, each has their own ways to fulfill those needs. Values help one to achieve them based on which need is important to him at that time personal values may guide individual to believe that he can find food by stealing. As a result, he steals or cheats to obtain money to buy food. Instead, one might believe that stealing is wrong, and that food should be bought from money he earns. Values help you establish what is important in your life. Without knowing values, one will have a difficult time understanding what is of more importance to him.

¹ Director of Research Nims University, Jaipur, India

² Principal, Vyas Teacher Training College, Jodhpur, India

³ Vice-Principal, Mollana Azad Muslim T.T. College, Jodhpur, India

*Responding Author

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He may often overlook aspects that are really important because of unaware of these values. Value may help to realize, would be happier doing a job that allowed being innovative and nourished one's passion. Realizing that value integrity may help to realize that one's current partner may not be the best fit due to an unhealthy acceptance of dishonesty and failure to show many acts of honesty in the relationship.

Kukreti (2005) probed into the value pattern of competent and incompetent teachers of secondary schools of Rajasthan. Random sampling technique was employed. He discovered that competent teachers scored higher on knowledge, creative and humanistic values and less on economic and political values. Subject of the groups were similar on their religious, social and aesthetic values as these values may not be considered as determinants of effective teaching. *Bajwa (2007)* reported that teachers who are in possession of aesthetic, social, democratic, knowledge and health values have sound mental health whereas on the contradictory those equipped with high economic, power and family prestige values have poor mental health. Thus right may of Teacher's Personal Values helped them to improve their will being. *Verma and Bawane (2011)* revealed through their findings that very high preferences for aesthetic and hedonistic values have been shown by college students. Average inclination was noticed towards religious, and family prestige values, whereas, lower were seen for democratic, knowledge, and health values and the lowest for social value. They also revealed that the college students have shown very high preferences for economic, and power values, and high preferences for aesthetic, and hedonistic values. Average inclination was noticed towards and family prestige value and religious value lower were seen for democratic, knowledge and health values and the lowest for social value.

Devi and Vig (2014) revealed that significantly higher proportion of urban adolescents were found on the dimensions of 'Hedonistic', 'Democratic' and 'Religious' values whereas rural adolescents were observed significantly higher on the factors of 'Family prestige'. Urban adolescents were found to have more faith in God, they believed in individuality and were against any kind of discrimination on the basis of caste, race and sex and family status. Urban Subjects did not believe in social inequality, however, rural adolescents gave more value to family prestige than urban adolescents. Rural adolescents believed in maintenance of purity by avoiding inter-caste marriages. Urban boys gave more value to power leadership and desired to rule or lead others and preferred that job where he/she could get opportunity to exercise of dominance over others.

Need and Significance

Women have been an ignored section of the Indian Society so not many studies have been conducted on such topics therefore not much of related literature was found. This study is very significant as it useful in developing clarity about various value aspects of women from rural and urban sectors. It will be helpful in construction of knowledge and also provide an insight on the

Comparison of PVQ between Extrovert Rural and Urban Females

topic. The results of this study will be useful in giving a concrete direction for development of various sectors of the Indian Society.

Objective

The objective of the present study was to compare the personal values between extrovert rural and extrovert urban females.

Hypothesis

It was hypothesized that females of urban and rural area will differ on their mean for value pattern. This assumption is based on findings of *Bhatia et al. (2007)* as well as *Devi & Vig. (2014)*.

METHODOLOGY

Research Design

This study is a field experiment study in which the control is used up to that limit where the naturalness of the field should not be disturbed. PVQ is taken as a set of dependent variable whereas extrovert traits of personality and rural and urban fields are taken as set of independent variables. To control external variables only female subjects were taken of same socio-economic status and with a range in between 30-40 years of age.

Sample

The purpose of present research is to investigate values among extrovert females of rural and urban areas with the help of random sampling technique, a sample of 360 females from urban area and females of similar number from rural area were selected. After screening on extrovert test finally 100 subjects from each region were selected. Prior to the selection the purpose of the research was explained to each subject and after taken their willingness the PVQ was administered.

Tool

In the present investigation for the measurement of different personal values, Personal Values Questionnaire the varieties of human values are innumerable. It is, therefore, a fond hope and surveys the entire spectrum of values. Some eclectic approach was needed to delimit the scope of values to be measured by means of this tool. It was decided that literature on values was the universe from which the samples of values could be conveniently selected. One criterion for their selection was their frequent mention in the literature. Another criterion was their relevance to the indigenous social milieu. Under their two considerations, the following ten values were selected for assessment. The following are different values which this questionnaire measures Religious value, Social values, Democratic value, Democratic value Aesthetic value, economic value knowledge value hedonistic value, power value family prestige value health value.

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The items were selected if their popularity value was found to lie between .200 and .800 and also if it correlated significantly with the total score i.e. Tri-serial value exceeded 180 ($p < .01$). On the bases of these two criteria 40 questions have 120 (40x3) items were selected. It may be mentioned here that a question was rejected even when a single item under it was found unsatisfactory. Thus the final draft contains 40 statements. Each value has an equal number of items and there are 12 items for each value. The responses are to be scored 2 for a tick mark showing the most preferred value under the stem. 0 for a cross showing the least preferred value under the stem and 1 for the blank or unmarked item showing the intermediate preference for the value.

RESULT

The following table is representing Mean, S.D. & “t” value on PVQ for both the group i.e. female urban and female rural area.

Values	Groups	Mean	S.D.	“t” value
Religious	Rural	14.32	2.22	5.21**
	Urban	12.35	3.05	
Social	Rural	14.30	2.07	5.63**
	Urban	12.33	2.82	
Democratic	Rural	12.12	3.11	0.21 ^{NS}
	Urban	12.21	3.02	
Aesthetic	Rural	8.98	3.12	2.01*
	Urban	7.98	3.87	
Economy	Rural	9.17	1.52	2.85**
	Urban	10.27	3.51	
Knowledge	Rural	14.12	2.14	0.73 ^{NS}
	Urban	13.9	2.14	
Hedonistic	Rural	10.59	2.65	2.22*
	Urban	9.59	3.65	
Power	Rural	13.62	4.52	10.02**
	Urban	8.15	3.062	
Family	Rural	14.15	3.06	1.37 ^{NS}
	Urban	13.66	1.83	
Health	Rural	14.53	2.17	6.52**
	Urban	12.53	2.17	

* $p < .05$, ** $p < .01$, NS- Not significant.

Interpretation

On Religious Sub scale of PVQ a mean score of 14.32 and S.D of 2.22 is obtained by rural female extrovert group of subjects whereas a mean score of 12.35 and S.D of 3.05` is obtained by urban female extrovert group of subjects. Significant difference between the means of both the groups i.e. ‘t’ is 5.21($P < .01$). The rural and urban field does have an impact on the religious values of subjects from both the groups. It shows that group of rural extrovert females have more

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religious values, they have faith in god and act accordance to the ethical codes prescribed in text than the urban extrovert females. On Social Sub scale of PVQ a mean score of 14.30 and S.D of 2.07 is obtained by rural female extrovert group of subjects whereas a mean score of 12.33 and S.D of 2.82 is obtained by urban female extrovert group of subjects. Significant difference between the mean of both the groups i.e. 't' is 5.63($p < .01$). The extrovert trait of the personality does have an impact on the Social values of subjects from both the groups. The rural female extrovert group of subjects believes more in charity, kindness, love and sympathy as compared to their urban counterparts. On Democratic Sub scale of PVQ a mean score of 12.12 and S.D of 3.11 is obtained by rural female extrovert group of subjects whereas a mean score of 12.21 and S.D of 3.02 is obtained by urban female extrovert group of subjects. Difference between the mean of both the groups i.e. 't' is 0.21 which is non-significant. The rural and urban field does not have an impact on the Democratic values of subjects from both the groups. This means both group of subjects believe in equality, and follow rules and regulations. On Aesthetic Sub scale of PVQ a mean score of 8.98 and S.D of 3.12 is obtained by rural female extrovert group of subjects whereas a mean score of 7.98 and S.D of 3.87 is obtained by urban female extrovert group of subjects. Significant difference between the mean of both the groups i.e. 't' is 2.01($p < .05$). The rural and urban field does have an impact on the Aesthetic values of subjects from both the groups. This means that the rural extrovert females appreciate beauty, form perception, music, dance, literature, etc. more than the urban female extrovert group of subjects. On Economic Sub scale of PVQ a mean score of 9.17 and S.D of 1.52 is obtained by rural female extrovert group of subjects whereas a mean score of 10.27 and S.D of 3.512 is obtained by urban female extrovert group of subjects. Significant difference between the mean of both the groups i.e. 't' is 2.85($p < .01$). The rural and urban field does have an impact on the Economic values of subjects from both the groups. This means that the urban female extroverts have strong desire for money and materialistic gains as compared to their rural counterparts. On Knowledge Sub scale of PVQ a mean score of 14.12 and S.D of 2.14 is obtained by rural female extrovert group of subjects whereas a mean score of 13.9 and S.D of 2.14 is obtained by urban female extrovert group of subjects. Mean difference between the both groups i.e. 't' is 0.726 which is non-significant. The rural and urban field does not have an impact on the knowledge values of subjects from both the groups. It shows that subjects of both groups love to learn, explore and discover new facts and information. On Hedonistic Sub scale of PVQ a mean score of 10.59 and S.D of 2.65 is obtained by rural female extrovert group of subjects whereas a mean score of 9.59 and S.D of 3.65 is obtained by urban female extrovert group of subjects. Significant difference between the mean of both the groups i.e. 't' is 2.22($P < .05$). The extrovert and introvert trait of the personality does have an impact on the hedonistic values of subjects from both the groups. This means that the rural female extroverts have a stronger conception of the desirability of loving pleasure and avoiding pain than the urban female extroverts. On Power Sub scale of PVQ a mean score of 13.62 and S.D of 4.52 is obtained by rural female extrovert group of subjects whereas a mean score of 8.15 and S.D of 3.06 is obtained by urban female extrovert group of subjects. Significant difference between the mean of both the groups i.e. 't' is 10.02 ($P < .01$). The

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rural and urban field does have an impact on the power values of subjects from both the groups. This means the rural female introvert group of subjects has more desirability for ruling or leading others than the urban female extrovert group of subjects. On Family Sub scale of PVQ a mean score of 14.15 and S.D of 3.06 is obtained by rural female extrovert group of subjects whereas a mean score of 13.66 and S.D of 1.83 is obtained by urban female extrovert group of subjects. Difference between the mean of both the groups i.e. 't' is 1.37 which is non-significant. This means that the rural and urban fields of subjects do not have an impact on the family sub-scale of both groups. The subjects of both groups have strong desirability for family status and prestige. On **Health Sub scale of PVQ** a mean score of 14.53 and S.D of 2.17 is obtained by rural female extrovert group of subjects whereas a mean score of 12.53 and S.D of 2.18 is obtained by urban female extrovert group of subjects. Significant difference between the mean of both the groups i.e. 't' is 6.52($p<0.1$). The rural and urban field does have an impact on the health values of subjects from both the groups. It shows that the rural female extrovert group of subjects has more consideration for keeping the body in a fit state for carrying out one's duties and functions than their urban counterparts.

Above results are in the line of *Ahmed (2003)* who focused on comparative study on values among Science and Arts students at senior secondary level. He concluded that there was no significant difference between the students of Science and Arts on all the ten values. However, mean score of science students was more on social, democratic, knowledge and power values whereas, mean score of Arts students, was more on aesthetic, economic, hedonistic and religious values. The mean score of both the groups was the same on family prestige value. Though conclusion of *Ahmed (2003)* is very close to present finding accept few values. Another study by *Bar and Gurmit Singh (2004)* reported that female teacher - trainees had significantly high Aesthetic value, whereas male teacher trainees had significantly high hedonistic and power value. Urban teacher trainees had significantly high economic values, whereas rural teacher trainees had significantly high family prestige value. These findings are also supported by present value pattern on urban & rural extrovert females. *Kukreti (2005)* discovered that competent teachers scored high on humanistic, creative and knowledge values and lower on political and economic values. Both the groups were similar on religious, social and aesthetic values as these values may not be considered as determinants of effective teaching. *Bhatia, Bhasin and et al. (2007)* studies the relation of gender on personal values in adolescents. The results did not show any differences between male and female students on any of these values. This shows that no gender difference exists in ethical beliefs and both male and female use almost similar processes for evaluation of ethical situations. *Verma and Bawane (2011)* revealed through their findings that the college students showed very high preferences for hedonistic and aesthetic values. Average inclination was noticed towards family and religious prestige values, lower were seen for health, knowledge and democratic values and lowest for social value. These findings are also in collaboration with present research. Study of *Nidhi and Jyoti (2011)* also supported by present analysis where they average inclination was noticed towards religious, and

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family prestige values, lower were seen for health, knowledge and democratic values and lowest for social value. *Devi and Vig (2014)* revealed that significantly higher proportion of urban adolescents were found on the dimensions of 'Democratic', 'Hedonistic' and 'Religious' values whereas rural adolescents were observed significantly higher on the dimensions of Family prestige. Urban adolescents were found to have more faith in God; they believed in individuality and were against any kind of discrimination on the basis of family, caste, race and sex status.

CONCLUSION

Present analysis indicates that urban females (extrovert) do not believe in social inequality, however, rural adolescents gave more value to family prestige than urban adolescents. Rural adolescents believed in maintenance of purity of family blood by avoiding inter-caste marriages. Urban boys gave more value to power and desired to rule or lead others and preferred a job where they could get opportunity to exercise authority over others. Hence it can be said that the hypothesis of present research is partially confirmed.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Ahmed, J. (2003). Education in Values. *The Educational Review*, 46 (2), 226-228.
- Bajwa, S. Puri. A.(2007). Mental health of teacher in relation to intelligence and values. *Journal of Edu trends* vol No. II p.p. 84-89
- Bar, J.S. and Gurmit Singh (2004). A Study of Values of Teacher Trainees (With special Reference To Sex And Locale). *The Educational Review*, 47 (6), 113-115.
- Bhatia, M. S., Bhasin, S. K., Upreti,R., Pandit,M., Singh,N. P.,(2007) A Study of Personal Values in Adolescents *DELHI PSYCHIATRY JOURNAL* Vol. 10 No.1
- Devi, Y and Vig, D. comparative study of personal values profile of rural and urban adolescents *Asian Journal of Home Science* Volume 9 | Issue 1 | June, 2014 | 128-133.
- Kukreti, B.R., Saxena , M.K. and Gihar, Sandhya (2005). Values and Teacher Competence : A Correlational Study. *Journal of AIAER*, 17 (3 and 4), 12-17.
- Sherry , G.P. and Verma R.P. (2005) *Manual for Personal Values Questionnaire*. Agra . National Psychological Corporation
- Verma ,N and Bawane, J.(2011). Personal values emerging among the Indian graduate students: Study conducted in a selected city of Maharashtra. *Internat. J. Edu. Soc. Dev.*, 2 (3) : 363 – 374.

Mental Health Problems of Parents with Intellectually Disabled Child

Manisha Soni^{1*}, Dr. Neeta Jain²

ABSTRACT

The purpose of the present study was to investigate the mental health of parents with intellectually disabled children (N=78) their mean age was 36.43 years. Another group of 100 parents were taken as a control group, who blessed with a normal child; their mean age was 37.24 years. Jodhpur Multiphasic Personality Inventory (JMPI) was administered individually to all of them. Results indicate that parents with intellectually disabled child scored higher on the elderly subjects scored significantly higher on MD, Heb, Sc (s). PD, Sc.PA, F, As, CR. Ph.D. Ne, SI, PU, ANR and Hy. D. categories of Form A of JMPI than the control group.

Keywords: *Mental Health, Intellectual Disability, Personality*

An intellectually disabled child in a family is usually stress producer for family members. It needs a reorientation and reevaluation of family aims, responsibilities and relationship with the community member. In India, the people of community have a different attitude towards intellectual disabled. In modern society, home-based care has resulted in many adverse consequences. The major drawback of this system is the child has no exposure for social interaction, hence, no opportunity for skill development.

The emotional stress and social stress that these parents undergo have been described by various investigators Seshadari (1983), Crnic et al. (1983), Wig et al (1985), Sethi & Sitholey (1986) & Tunali and Power, (1993) found that the parents of mentally retarded children had low level of sound mental health because they had a high level of perceived stress. Kumar and Aktar (2001) reported that mothers of mentally retarded children had a higher level of anxiety and stress in comparison to the mothers of normal children. They reported that the mothers of mentally retarded children differ significantly from the parents of normal children on anxiety and stress level.

¹ Research Scholar, Department of Psychology, J. N. Vyas University, Jodhpur, India

² Faculty Member, TEPSE & HEPSN Centre, J. N. Vyas University, Jodhpur, India

*Responding Author

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Upadhyaya, G.R. and Havalappanavar (2008) assessed Fathers and mothers of 628 mentally challenged individuals for their perceived stress. They reported that mothers have shown higher stress compared to fathers, the difference being significant at 0.01. Most of the parents report mild to moderate stress and none of them report very high stress. In the areas of social stress, stress of care and, emotional stress reported higher for these parents. It is noticed that more than one mentally challenged children in the family; higher levels of behaviour disorder; lower age of the mentally challenged, individual and parents; and lower income of the family are associated with higher stress.

Seth (1979) reported care stress and social stress in 83% of mothers, emotional stress in 80% of mothers and financial problem in 47% of mothers. Datta et al (2002) find that expressed emotions toward the child, age of the child and income as important factors associated with burden. Gupta & Jain (2002) find that less educated, low income group and rural parents have more problems with their spastic mentally handicapped children.

METHOD AND PROCEDURE

Sample

A sample of 78 parents with intellectually disabled child was drawn from different parts of the Jodhpur City. The individuals, who have scored high on validity scales L and F, were eliminated. The age of the parents was 28 & above with a mean of 36.43 years on the other hand a control group of 100 parents who have normal child was taken as control group from Jodhpur city the average age of this group was 37.24 years. All the individuals were taken from both the category of socio-economic status i.e. lower middle class and lower class. Most of them had passed secondary examination. All of them were approached individually at their homes for the present study.

Material

Jodhpur Multiphasic Personality Inventory (JMPI) constructed and standardized by Joshi and Malik (1980) consists of three broad areas, viz, Psychoses, Psyconeuroses and Psychosomatic dis-orders. The three parts of JMPI consist of 336, 273 and 250 items respectively. Keeping in view the length of JMPBI, Malik and Gunthey (1980) developed parallel forms (Form A and Form B) of this inventory. For the present study Form A has been used for two parts only i.e. Psychosis and psychoneuroses. The psychoses part of Form A consists of 178 items and measures problems of 6 areas, viz. Schizophrenia Simple (ScS), Schizophrenia Paranoid (ScPa), Paranoia (Pa), Hebephrenia (Heb), Psychotic Depression (PD) and Manic Depression (MD). The psychoneuroses part of this inventory consists of 149 items and there are 7 clinical scales, viz. Anxiety (AN), hysteria Dissociate (Hd.D) Conversion Reaction (CR), Phobia (Ph). Obsessive Compulsive (OC), Depression (d), Neurasthenia (Ne) & one non- clinical scale i.e. Social introversion (SI). Besides these above mentioned scales there are three validity scales, Viz. LK. and F. in each part of JMPI. The split half reliability of Form A ranges from .67 to .89 while the

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same kind of reliability for Form B ranges from .64 to .83. Form A (psychosis & Psychoneurosis) were administered to the subjects of both the group individually. The scoring was done with the help of JMPI Manual.

RESULTS AND DISCUSSION

It can be seen from table 1 that parents of intellectually disabled child scored significantly higher on all the scales except Pa and L of psychoses part of Form A, as compared to the parents of normal child. This means depression hyperactivity, less control over feelings and thoughts, dominance of suspicious were found in higher degrees among these parents as compared to their counterpart but it does not mean that the parents are in the grip of these problems. They may develop such disorders of perceived stressful situation which are not in their control.

Table-2 represented that parents of intellectually disabled child scored significantly higher on some categories of psycho-neuroses part than the parents of a normal child. It seems that parents of intellectually disabled child suffer from psychoneurotic problems, such as, conversion reaction, phobia, depression, neurasthenia. In other words these parents may experience fleeting episodes of saddened effect. Loss of energy, fear and excessive fatigue seems to be more dominant in these parents than in with normal child. On SI scale parents of intellectually disabled child scored significantly higher than the control group. This reveals that there is a significant decline in the physical activities of the parents of intellectually disabled child as compared to the control group. Social contacts for these parents lead to unnecessary physical exertion, disorientation and apathy. Present findings confirm the previous Upadhayaya and Havalappanavar (2008), Seth (1979), Gopalakrishna & Seetha (2002) and Gupta & Jain (2002)

Mothers report higher levels of stress compared to fathers. Most of the parents report mild to moderate Psychoses, Psyconeuroses. None of the parents report very high level of disorder. In two areas of stress (care, emotional and social) mothers report higher psychological problem and in the area of financial stress, both fathers and mothers report equal levels of stress. For fathers, disturbed behaviour and extra inputs of care are the prominent factors, the other one being decreased leisure time. For mothers, decreased leisure time and extra inputs of care are the major factors, the other one being disturbed behaviour. Parents have reported effect on siblings as a major factor. Results indicate that more than one mentally challenged child in the family, higher levels of psychological problem in the index child, lower age of the mentally challenged child, lower age of parents and lower income of the family are associated with higher stress

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Table –I, Significant differences between two groups on psychoses part of Form A.

Group		Md	Heb	SC(s)	PD	ScPa	Pa
Parents of RD with ID	M	32.13	8.80	40.04	10.28	9.62	14.01
	SD	8.17	1.23	10.12	4.62	4.12	5.54
Parents of RD with Normal Child	M	23.52	6.65	33.84	7.99	4.45	13.83
	SD	6.76	1.72	10.33	3.12	1.98	4.01
“t”		6.1987*	4.4305*	3.6162*	3.6778*	5.0302*	.7209

* Significant at .01 Level, NS – Not Significant

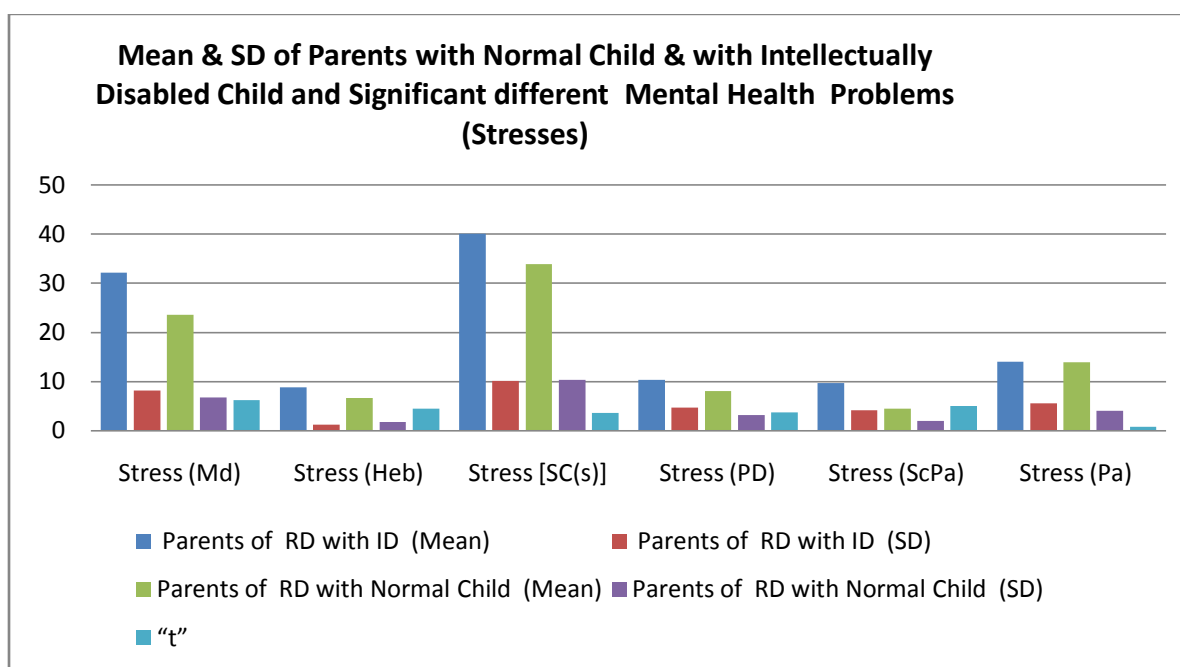


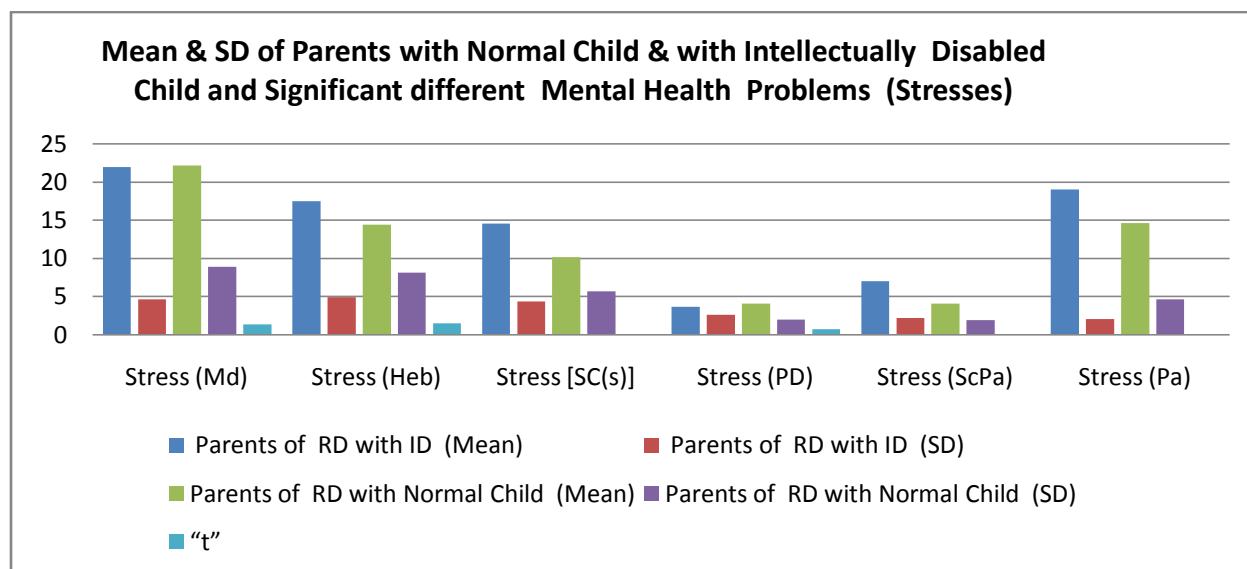
Table –II, Significant differences between two groups on Psychoneurotic Part of Form A

Group		AN	DC	CR	Hy (D)	Ph	D	Ne	SI
Parents of RD with ID	M	21.91	17.46	14.56	3.62	6.99	19.01	13.37	24.71
	SD	4.59	4.87	4.34	2.57	2.16	2.05	3.28	3.72
Parents of RD with Normal Child	M	22.12	14.38	10.14	4.02	4.06	14.57	8.62	20.24
	SD	8.88	8.13	5.66	1.98	1.92	4.62	2.23	7.16
“t”		1.3289	1.4948	4.0558*	.7297	2.5060**	3.6412*	8.8124*	2.3471**

* Significant at .01 Level

** Significant at .05 Level NS – Not Significant

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CONCLUSION

Investigators have been interested in finding out the major mental health problems of parents of intellectually disabled child. The data indicated that these parents suffer with many types of problems. This all may be due to the fact the environmental niche in which the individual lives typically changes with social perception. This brings a change in the individual. At the same time physiological changes also occur which place additional stress on the personality system as it seeks to adjust itself with the environment. Sometimes these internal and external stresses overwhelm the system and dysfunction occurs.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Crnic KA, Friedrich WN, Greenberg MT. Adaptation of families with mentally retarded children: A model of stress, coping, and family ecology. *Am J Ment Defic.* 1983;88:125–38. [PubMed]
- Datta, S.S., Russell P., Swamidas, S., Gopalakrishna & Seetha, C. (2002). Burden among the caregivers of children with intellectual disability: associations and risk factors. *Journal of Learning Disabilities*, 6,337-350.
- Gupta, M. & Jain, M. (2002) A study of problems of parents about their mentally retarded children with spastic cerebral palsy. *Disabilities and Impairments*, 16, 123-128

Mental Health Problems of Parents with Intellectually Disabled Child

- Joshi, M.C. and Malik, A.K. (1980) Jodhpur Multiphasic Personality Inventory. Unpublished Ph.D. thesis Jodhpur University, Jodhpur.
- Kumar I, Akhtar S. Rate of anxiety in mothers of mentally retarded children. *Indian J Psychiatry*. 2001; 43:27.
- Malik, A.K. and Gunthey, R.K (1980) Parallel forms of Jodhpur Multiphasic Personality Inventory. An unpublished research data, Jodhpur University, Jodhpur.
- Seshadari M. Impact of the mentally handicapped child on the family. *Indian J Clin Psychol*. 1983;10:473–8.
- Seth S. (1979). Maternal attitude toward mentally retarded children. In *Developmental Psychology*. Parameswaran and Bhogle (Eds), Light and Life Publishers, New Delhi.
- Sethi BB, Sitholey P. A study of the time utilization, perception of burden and help expectation of mothers of urban mentally retarded children. *Indian J Soc Psychiatry*. 1986;2:25–44.
- Tunali B, Power TG. Creating satisfaction: A psychological perspective on stress and coping in families of handicapped children. *J Child Psychol Psychiatry*. 1993;34:945–57.
- Upadhyaya, G.R. and Havalappanavar, N.B. 2008, Stress in Parents of the Mentally Challenged *Journal of the Indian Academy of Applied Psychology*, Vol. 34, Special Issue, 53-59.
- Wig NN, Mehta M, Sahasi G. A study of time utilization and perceived burden of mentally handicapped child in joint and nuclear families. *Indian J Soc Psychiatry*. 1985;1:251–61.

Personality Correlates of Academically Deprived Children

Nilofer Khan^{1*}, Yogendra Singh Shekawat²

ABSTRACT

The purpose of the present investigation was to study the personal and personality factors, associated with the academically deprived children. In India larger number of students particularly those who belong to low socio economic status either does not go to school or dropout in between their initial stages of academic carrier. A sample of 50 students was selected from govt. school of Jodhpur (this group was academically non-deprived, used as control group). Results showed that parent's income and education were significantly lower for Academically Deprived (AD) children, than the parents of academically non deprived students. The AD group has considerably more middle born among them, than Non AD group.

Keywords: *Personality, Academically Deprived Children*

It is observed that there is a large difference between the personalities of academically deprived individuals as compared to academically non deprived students. Previous researches have persistently shown similar associations between socioeconomic status and academic outcomes, as in case of International Reading Literacy Study (PIRLS) *Ferguson et al (2007)* assessed the comprehensive literacy skills of grade 4 students in 35 countries. The Programme for International Student Assessment (PISA) assessed math, science and reading, scores of children of 43 countries *Adoms and Pisa (2000)* reported a significant relationship between academic achievement and socio economic status. An another research *Brownell et al. (2006)* completed by the Institute of Research and Public Policy demonstrated only few differences between low and high socioeconomic children, when results were compared for children who should have attempted the examination, the differences between two socioeconomic status i.e. children from low and high socioeconomic status were staggering, due to those children who left school early in the low socioeconomic group.

Differences of the academic achievement curves of students during the school year and over the academic session showed that much of the achievement gap between low and high SES students could be related to their family, community and school environment. Findings strongly support

¹ Research Scholar, Dept. of Psychology, Jnvu, Jodhpur, India

² Research Scholar, Department of Psychology, J. N. Vyas University, Jodhpur, Raj., India

*Responding Author

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the notion that schools play a critical compensatory role; however, it also reveals the importance of continued support for disadvantaged students outside of the school environment among their families and within their communities *Alexander et al (2001)*.

Previous studies have also demonstrated the relationship between low-income households and decreased school readiness. *Thomas (2007)* reported that economically poor children score significantly lower on measures of communication and vocabulary skills, knowledge of numbers, copying and ability to concentrate, symbol use, and cooperative play with other children than children from higher income of family. *Willms et al (2007)* evaluated that kids from lower socioeconomic status, family scored less on a receptive vocabulary test than higher socioeconomic status children. They concluded that poor children arrives school at a cognitive and behavioural deprivation opportunity to acquire social skills. Schools are not in a situation *Janus et al (2007)* found that schools with the big proportion of children with less school readiness were from surrounding of high social risk, including poverty and deprivation.

In development countries socioeconomic disadvantage and other risk factors are associated with poverty high family stress and lower parental education have a negative effect on thinking feeling and academic achievement, *Brooks and Duncan (2007)*. Living in extreme and persistent poverty has specific negative effects *McLoyd (1998)* though the implication of not being defined below the poverty line but still suffering from material hardship should not be underestimated *Gershoff et al (2007)*. Many researchers found significant interaction effects between socioeconomic status and risk exposure to risk factor. Parents from low socioeconomic background were not only more likely to have their babies born prematurely, but these prematurely born children were not proportionately at high level of risk for school unsuccessfulness than children with a similar neonatal record from higher level of total family income *McLoyd (1998)*.

Objectives

On the basis of above view an attempt was made to find out pattern personality factors among academically deprived adulthood.

The following objectives were taken:

1. To find out the pattern of personality factors among academically deprived and academically none deprived adulthood.
2. To find out the personal factors like income, parental education, residential area and birth order of academically deprived group.

Hypothesis

1. It was hypothesized that both the groups will differ significantly on some of the personality traits.

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2. It was also hypothesized that on personal factors like income, parental education, residential area and birth order of academically non deprived group will differ from academically deprived individuals.

METHODOLOGY

Research Design

The present study is not possible experimentally because of nature of investigation. It is a survey quantitative research in which the events have already occurred and the effects of variables were studied by the quantitative analysis of the work. In this research, academically deprivation is taken as independent variable whereas personality and personal factors selected as dependent variables.

Sample

With the help of purposive sampling technique subjects were selected for the present research. Investigator approached to parents of rural and urban area, explained the purpose of research and request is made for data collection. After permission, 50 academically deprived individual were selected. The purpose of research was explained to each individual. A sample of 50 students was selected from govt. school of Jodhpur (this group was academically non-deprived, used as control group). While selection of the sample care was taken that only those students from rural area were selected who dropped out at the early stages of their schooling due to economic problem. Care was also taken in to account that none of the subject of both the groups has any bad habit or mal-adjusted behavior.

Tool

To measure personality traits Jr. Sr. High School Personality Questionnaire (HSPQ) Hindi Version by Kapoor and Srivastava (1980) was used. The HSPQ measures fourteen distinct dimensions or traits of personality which have been found by psychologists to come near to covering the total personality. By working with these fourteen scores, the psychologist can obtain predictions of school achievement of vocational fitness, of danger of delinquency, of likelihood of leadership qualities, of need for clinical help in avoiding neurotic conditions etc. The reading level of the test is adapted to ages 11 to 12 through 18 years, and the scoring can be done rapidly by a stencil key. Each dimension is defined by two poles, or extremes. The left hand one is descriptions is a score at the low end of the stens (1, 2 or 3) and the right hand, at the high end (8, 9 or 10). However, one should guard against assuming that high score (10) are necessarily “good” and low scores, “bad”. This may be true of abilities, but in personality each type of temperament usually has both its good and its bad points. For example, in dimension A the high scoring warmhearted person is rated as good-natured attentive to people, and trustful, but his easygoingness means that his promises do not always mean as much as those of a person at the low score pole on A. The latter is precise and dependable in his work, but his aloofness

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and stiffness is not so attractive socially (or in any contact work). This is but one example; both good and bad are typically found at either pole on most of the HSPQ personality factors.

RESULTS AND DISCUSSION

Table -1: Comparison between Academically Deprived and Non- Deprived Adulthood on the HSPQ Factors.

Factors of HSPQ	academically non deprived		academically deprived		“t” values
	Mean	SD	Mean	SD	
A	11.10	3.13	10.15	4.24	1.75 NS
B	5.95	1.46	4.55	2.32	3.51**
C	10.50	2.64	9.10	2.26	1.01 NS
D	9.10	2.17	8.46	1.99	1.02 NS
E	7.10	2.14	8.56	2.05	2.36*
F	9.10	2.20	10.70	3.01	0.52 NS
G	12.35	3.71	11.85	3.17	0.78 NS
H	11.50	2.87	10.50	2.26	1.32 NS
I	7.20	1.96	9.30	1.98	3.79**
J	8.50	2.15	8.70	1.69	0.38 NS
O	7.10	2.51	8.05	1.42	5.05**
Q ₂	8.90	2.52	8.45	1.71	0.72 NS
Q ₃	10.90	2.61	11.42	2.05	0.74 NS
Q ₄	7.10	3.00	9.10	1.66	3.01**

*= p less than .01

** p less than .05,

NS- Non significant

Results showed that parents income and education were significantly lower for Academically Deprived (AD) children, than the parents of academically non deprived children, ($p < .01$). The AD group has considerably more middle born among them, than Non AD group ($P < .05$), Rothbart, 1971 had found in their studies that first born and last born children get a special kind of attention from their parent and middle born was ignored, this may lead to academically deprived circumstances. Like- wise, lower income or poverty could be interpreted as hindrance in one's academic needs. The poor parents could not fulfill all the requirements of their children so the lack of satisfaction of needs might also produce frustration and may result in delinquent behavior like aggression, stealing etc.

Comparing the personality factors of the academically deprived and the academically non-deprived as shown in tables the academically deprived appeared to be less intelligent, more assertive, more worrying depressed and guilt prone. They also showed more tension and frustration and are more dependent. Their behavior seems to be related with lower intelligence. Lack of intelligence makes the behavior less adjective and less efficient. The academically deprived appeared more obedient (Table-I). The assertive behavior of academically deprived might be result of the feeling of inadequacy in him, i.e. a compensatory mechanism. The academically deprived significantly differs from non-academically deprived on anxiety factor

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(Table-I). Sources of anxiety may be many e.g. the non-satisfaction of their needs, the behavior of the parents of some other factors.

School prepares a child's skills to succeed both socially and academically in a class room situation. It needs physical well-being and adequate emotional health, motor development and a favourable approach to new experiences, age-adequate social knowledge and competence, age-suitable language skills, and age-appropriate general knowledge and cognitive skills. It is adequate recorded that poverty reduces a child's readiness for school through aspects of neighbourhoods, health and home life, and schooling. Poverty-related factors are known to influence child development in general and school readiness in particular. They are factors characteristics, duration, timing, depth and poverty and the effect poverty has on the child's psycho-social network. A child's family members have a strong influence on school surroundings. Children from deprived families some time do not get the stimulation and do not learn the social abilities required to prepare them for school. Psycho-social problems like are parental irregularity, income, with regard to daily activities and parenting, regular changes of primary caregivers, lack of direction and importance role modeling. Oftenly, the parents of these children do not receive any support. Present findings are in support of Adams (2007), Willms (2007), Brooks and Duncan (2007) and Thomas (2007).

CONCLUSION

It may be concluded that academically deprived and academically non deprived adulthood differ in personal factors, as academically deprived come from poor, less educated families and more of them were middle born. They also show themselves less intelligent, more assertive, more worrying and depressed as compared to academically non deprived group on H.S.P.Q. Questionnaire

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Adams R, Wu M. PISA (2007) Technical Report, OECD., <http://www.oecd.org/dataoecd/53/19/33688233>.
- Aichorn, A (1935) Wayward youth, N.Y. Yiking, p. 118.
- Alexander KL, Entwisle DR, Olson LS. (2001) Schools, achievement and inequalities: A seasonal perspective. *Educ Eval Policy* 23:171–91.
- Bettleheim, B. (1950) Love is not enough, N.Y. Free Press, p. 118, 121,122

Personality Correlates of Academically Deprived Children

- Brooks-Gunn J, Duncan GJ. (2007) The effects of poverty on children and youth. http://www.futureofchildren.org/ usr_doc/vol7no2ART4.
- Brownell M, Roos N, Fransoo R, et al. (2006) Manitoba Centre for Health Policy Is the class half empty? *Choices*.12:3–30.
- Burt, Healy & Lombroso (1945) The psycho-analytical approach to juvenile delinquency, Fridlander K., Kegan Paul, Trench, Trubner & Co. Ltd. Broadway house, p. 98-115.
- Cohen, A.K. (1955) *Delinquent boys: The culture of the gang*, N.Y. Free Press.
- Duncan GJ, Brooks-Gunn J, Klebanov PK. (1994) Economic deprivation and early childhood development. *Child Dev*. 65:296–318.
- Gershoff ET, Aber JL, Raver CC, Lennon MC. (2007) Income is not enough: Incorporating material hardship into models of income association with parenting and child development. *Child Dev*.78:70–95.
- Guleck, S. and Glueck Eleanor (1950) *Unravelling juvenile delinquency*, N.Y. Commonwealth fund.
- Hilton, I (1967) Differences in the behavior of mothers toward first and last born children, *J. pers. Soc; psychology*, 66, p.7,244,282-290.
- Janus M, Walsh C, Viverios H, Duku E, Offord D.(2007) School readiness to learn and neighbourhood characteristics. http://offordcentre.com/readiness/files/PUB.2.2003_Janus-Walsh.
- McLoyd VC.(1998) Socioeconomic disadvantage and child development. *Am Psychol*.;53:185–204.
- Redl, F. (1956) Discussion in Helen L. Witmer and Ruth Kotinsky (Eds.) *New perspectives for research on juvenile delinquency children's Bureau publication*, Washington, D.C.: U.S. Government printing office, No. 356.
- Redle, F. and Wineman, D. (1951) *Children who hate*, N.Y.: Free Press, 118.
- Rothbart, M.K. (1971) Birth order and mother-child interaction in an achievement situation, *J. press, soc., psychology*, p. 74, p.113-119, 244-245.
- Schacter, S. (1959) *The psychology of affiliation*, Stanford, Stanford University Press, p. 46-55, 243-244
- Thomas EM. (2007) Readiness to learn at school among five-year-old children in Canada. <http://www.statcan.ca/english/research/89-599-MIE/89-599-MIE2006004>.
- Willms JD (2007). Ten hypotheses about socioeconomic gradients and community differences in children's developmental outcomes. <http://www.hrsdc.gc.ca/en/cs/sp/sdc/pkrf/publications/ research/2003#001272/ page00.shtml>

Alpha Waves In Relation To Different Intellectual Levels

Praditi Choudhary^{1*}

ABSTRACT

Our brain is made up of billions of brain cells called neurons, which use electricity to communicate with each other. The combination of millions of neurons sending signals at once produces an enormous amount of electrical activity in the brain, which can be detected using sensitive medical equipment (such as an EEG), measuring electricity levels over areas of the scalp. In the present was to study the beta waves among different IQ groups. The extreme groups were selected on the basis of their scores on Raven's progressive matrices. Results have revealed that the beta waves have a significant positive correlation with High IQ and Intellectually disabled group.

Keywords: *Alpha Waves, Relation, Intellectual Levels*

Our brain is made up of billions of brain cells called neurons, which use electricity to communicate with each other. The combination of millions of neurons sending signals at once produces an enormous amount of electrical activity in the brain, which can be detected using sensitive medical equipment (such as an EEG), measuring electricity levels over areas of the scalp.

Giannitrapani (1969) studied the relationship between the average frequency of the EEG and WAIS I.Q. scores indicated a strong relationship between I.Q. and average frequency asymmetries in left and right homologues areas. The correlations were higher in the posterior areas and for performance I.Q. A composite score of all EEG areas tested which took into account the negative correlations of the occipital areas (frontal + temporal + parietal – occipital), showed for the Thinking condition a spearman rho with Verbal I.Q. of 0.59 with performance I.Q. of 0.78 and with full I.Q. of 0.72 alpha index correlations were also higher during the Thinking conditions and performance I.Q.

Jahidin (2013) discusses on the brainwave sub-band characteristic for different intelligence groups based on electroencephalogram (EEG) power ration technique. The EEG datasets have

¹ Research Scholar, Department of Psychology, J. N. Vyas University, Jodhpur, India

*Responding Author

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been collected from 50 healthy subjects for two sessions; at relaxed closed eye (CE) state as reference and cognitively-stimulated state, subjects need to answer the intelligence quotient (IQ) test based on Raven's standard progressive matrices (RPM). Sub-band power ratio from the two sessions were calculated and further analyzed to observe the pattern among different IQ groups. The results show that by implementing power ration technique, the pattern of IQ groups especially in the relaxed state can be clearly observed. It can be concluded that the value for alpha ratios is higher for high IQ group compared to low IQ group. In contrast to beta and theta ratio where high IQ groups have lower value compared to the low IQ group. This indicates that the ESD ratios can discriminate the characteristic of brainwaves for intelligence assessment.

It is well known that IQ test will determine how brighter the persons are or how smarter their brains are. It reflects to how fast be their central nervous system (CNS) is working. The speed of CNS can be indexed via EEG. *Posthuma et al.(2001)*. Various studies have been conducted to investigate the relationship between human's IQ scores with their brainwaves and cognitive performance measured by EEG. Even though the researchers had introduced various techniques to relate EEG characteristics with IQ such as alpha rhythm frequency *Anokhin and Vogel (1996)*, event related de-synchronization/ synchronization (ERD/ERS) *Dopplemayr et al. (2005)*, the relationship between EEG and IQ for normal adults still in puzzle. In order to solve this puzzle, researchers had made a thorough study mostly on EEG alpha power/frequency and specific cognitive abilities. According to *Doppelmayr et al. (2005)*, the group of high IQ had larger absolute alpha power than the group with low IQ. In addition, Peak Alpha Frequency (PAF) can be used to measure the differences in cognitive performance in reading computation information problem solving and arithmetic and so on. *Angelakis et al. (2004)*. The resting of EEG power can associated with various cognitive traits *Zietsch et al. (2007)* EEG alpha power desynchronizes when individual performing task than doing nothing. *Fink and Neubauer (2006)*. The higher score of IQ test is strongly related with the decreased of EEG coherence longer EEG phase delay and increased EEG absolute power *Thatcher et al. (2005)* IQ can be categories into 7 categories according to the standard IQ grouping (Wechsler scales) where the category 1 has IQ score lower than 70 category 7 has IQ score more than 130. The mean score of IQ test is 100 and the standard deviation is 15. *Psychologie on line (2009)* Hence IQ scores can definitely show the individual's cognitive ability in term of EEG power spectrum. *Zietsch et al. (2005)*. The experimental done on the verbal (semantic) IQ and spatial (rotation) IQ showed that males had highest correlation with their brain activation. *Neubauer et. al. (2005)* Thus IQ scores may be influenced by various factors such as gender genetic cognitive processing speed memory performance gifted intellectual ability and so on. The high IQ also indicates how efficient their neural activity in dealing with cognitive task is. In addition the individual's intelligence is associated with a lower brain activation or lower ERD. *Neubauer & Fink (2009)* Researcher had come out with various techniques or methods to analysis the EEG signals. Among the best techniques is time-Frequency analysis (TFA) of spectral analysis. It could correctly translate the brain activity in term of power and frequency. According to *Novikova et al. (2009)*, the power

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spectral amplitude of EEG frequency bands is popular parameter in studying spontaneous electroencephalogram (EEG). *Novikova et al. (2009)* However the systematic correlation between spectral EEG power and intelligence still in question since some author failed to do so but other did find correlation between the intelligence parameters and the α and θ rhythm power.

Niemiec & Lithgow (2005) the study is only focusing on alpha and beta band of the EEG waves and their correlation with cognitive performance. *Jahidin et. al (2013)* analysis asymmetry pattern of resting brainwave for different intelligence levels. EEG signals were measured from fifty samples and three IQ levels were established from Raven's Progressive Matrices. Asymmetry scores for alpha and beta waves were computed by subtracting in transformed ESD of the left from right hemisphere. The study elucidate that individuals in high IQ level exhibit a balanced brain with smaller asymmetry score for alpha and beta waves compared to medium and low IQ levels. Meanwhile, the medium and low IQ levels exhibit unbalanced brain alpha and beta activity with greater asymmetry values.

The objective of *Schmid et al (2002)* was to investigate the relationship between the degree of intelligence and spectral electroencephalographic (EEG) parameters and to find out which EEG variables are relevant for this correlation. The results of t tests and correlation analyses confirm the strong relationship between spectral EEG parameters and the degree of intelligence indicating that the 'EEG recordings do reflect intellectual abilities'. It may be supposed that the amount of the intelligence quotient is correlated with the degree of EEG maturation and thus reflects the active number of synapses and the degree of differentiation of the neuronal controlling system.

Problem

Since the previous works focused on the relationship between alpha power/frequency with cognitive performance this study introduces novel method by relating the alpha correlation with IQ performance beta is one of the EEG frequency bands which represent the state of alertness and wakefulness with frequency ranging from 13Hz to 30 Hz. The PSD of alpha band were measured from selected samples who underwent two tasks; eye-closed (doing nothing in relax state) to be act as a baseline task and IQ tests. In order to translate or interpret correctly the cognitive performance of the student the ratio of the alpha power and vice versa were measured. According to *Niemeic and Lithgow (2005)* a large power of alpha power indicate the relax state of the brain activity and low power of alpha band indicate the active state of brain activity.

On the basis of above view an attempt is made to study "Alpha Waves in Relation to Different Intellectual Levels".

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Objectives

1. To examine the influence of Alpha brain waves on Intellectual level.
2. To study the pattern of Alpha brain waves for different levels of Intelligence.

Hypothesis

1. It was hypothesized that there will be differences among alpha waves for different levels of Intelligence.

METHODOLOGY

Research Design

It was an experimental study in which Independent variable was different types of IQ levels and Dependent variable was Alpha waves in the EEG procedure. Recording of Alpha waves were used in closed eye and open eye situation. The signal was processed, filtered and after that feature extraction of alpha waves and lastly computation of brain waves scores was done. The complete experiment for each subject has 2 types of sessions one is relaxed closed eyes for 3 minutes and the other one is relaxed open eyes for 3 minutes. The EEG was administered, monitored and interpreted only by a specially trained health professional.

Sample

In the present investigation with the help of randomized sample technique 20 children with above average and average intellectual levels were be selected the number of children was be 10 for each group. Apart from that 30 children with intellectual disability were selected 10 for each category i.e. Mild, Moderate and Severe category respectively. These children were randomly selected from TEPSE & HEPSN centre of Jai Narain Vyas University, Jodhpur and Navjyoti Manovikas Kendra, Jodhpur, Rajasthan.

Tools

Coloured Progressive Matrices (Raven 1983): Designed for children aged 5 through 11 years-of-age, the elderly, and mentally and physically impaired individuals. This test contains sets A and B from the standard matrices, with a further set of 12 items inserted between the two, as set Ab. Most items are presented on a coloured background to make the test visually stimulating for participants. The Raven test is a widely used intelligence test in which subjects are asked to find the missing pattern in a series. Each set of items becomes progressively more complex, requiring greater cognitive capacity to encode and analyze. In this version of the Raven's Progressive Matrices however, each item is printed with a brightly colored background, making the test more appealing for children. The testee is shown a series of patterns with parts missing. The parts removed are of simple shape and have been placed below the matrix, among other similarly shaped pieces. The problems are easy to begin with, but grow more difficult as the test proceeds. The testee can either point to the pattern piece she/he has selected or write its corresponding

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number on the record form The total score is the total number of matrices completed correctly, and the test is thus scored out of 36.

EEG Machine: An Electroencephalogram (EEG) is a neurological diagnostic procedure that records the changes in electrical potentials (brain waves) in various parts of the brain.

PROCEDURE

Nearly 80 students were screened out on the basis of their IQ levels out of which 50 subjects were selected after screening their IQ levels.10 in each category i.e. Mild intellectually disabled, moderate intellectually disabled, severe intellectually disabled, Average intellectual category and Above Average intellectual category.

The researcher approached the normal schools and special schools in Jodhpur which were Miranda Public School, Jodhpur, Navjyoti Manovikas Kendra, Jodhpur and TEPSE & HEPSN Centre. Researcher explained the procedure and objective of her research to the authority of the school with a request to get permission for work with the normal and special children. After getting the permission she has started establishing the rapport with these children. The researcher first conducted Raven's Colored Progressive Matrices Test on children without any intellectual disability aged from 6-11 years to out their IQ. Special teachers assigned the children to the researcher as per their intellectual category i.e. Mild, Moderate and Severe Category. All the subjects were told to wash their hair the day before the test as the oil in the head makes it harder to adhere the electrodes to the scalp. The alpha brain waves were measured in 2 sessions with open and closed eyed with the help of the technician.

RESULTS

Table-1: Showing Alpha waves frequencies during open eye and relaxed condition for different mentally retardate categories & average, above average categories of IQ

Category	Mild	Moderate	Severe	Average	Above Average
Mean	32.04	29.09	22.23	38.29	41.91
SD	11.08	9.2	6.38	8.68	9.56

Table represents a Mean of 32.04 and a SD of 11.8 for Mild category of Mental Retardation, when the condition was open eyes with relaxed situation. It also highlights a Mean of 29.09 and a SD of 9.2 for Moderate category of Mental Retardation group when the eyes are opened and situation is relaxed. Table exhibits the Mean of 22.23 and the SD of 6.38 for severe category of Mental Retardation group when the eyes are opened and the situation is relaxed. Table also represents a Mean of 38.29 and a SD of 8.68 for the Average category of intelligence, when the eyes are opened and the situation is relaxed. Lastly it manifests a Mean of 41.91 and a SD of 9.56 for the Above Average of individuals, when the eyes are opened and the situation is relaxed.

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Table-2- Showing Alpha waves frequencies during closed eye and relaxed condition for different mentally retardate categories & average, above average categories of IQ

Category	Mild	Moderate	Severe	Average	Above Average
Mean	30.66	27.28	20.13	35.68	37.19
SD	12.18	6.12	9.67	10.87	12.66

Table reveals that mild group represents a Mean of 30.66 and a SD of 12.18, group when the situation was closed eyes with relaxed condition, this group. It also depicts the Mean of 27.28 and the SD of 6.12 for moderate category of Mental Retardation group when the eyes are closed and the situation is relaxed Table shows a Mean of 20.13 and a SD of 9.67 for the severe category of Mental Retardation group when the condition was closed eyes with relaxed situation. It also displays a Mean of 35.68 and a SD of 10.87 for the Average IQ category of individuals, when the eyes were closed and the situation was relaxed. At the end table also highlights a Mean of 37.19 and a SD of 12.66 for the Above Average IQ Category of individuals, when the condition was closed eyes and the situation was relaxed.

DISCUSSION

In the present investigation an attempt was made to find out how alpha waves are related to intelligence level whether these waves have any influence on cognitive level of the individual or not. After analysis of data present findings of Alpha & intelligence were in collaboration with previous studies. Since the discovery of Electro-Encephalogram (EEG) previous studies reported that brain electrical activity relates to psychometric intelligence. The present findings are also in support of studies conducted by *Ahmed et.al (2012)*, they reported the EEG signals have close relationship with cerebral disorder and diseases as well as human intelligence. In past studies have attempted to relate peak frequency to intelligence, arguing that a faster oscillating brain reflects rapid information processing, which in turn is associated with higher intelligence (e.g., *Vogel and Broverman, 1964; Anokhin and Vogel, 1996; Osaka et al., 1999*). Present findings are more or less closer to *Jahidin et al. (2013)* who represented that high IQ level tends to be more balanced with smaller asymmetry value for alpha and beta waves. A high IQ level is characterized by a right dominant alpha activity.

Present data also indicates that the subject of higher mental age tend to differ from those who have below mental age, as far as their Alpha waves is concerned with respect to regular rhythms. The current research also evident that EEG is so poor regularity or rhythm among intellectually disabled children than the normal children. Increases Alpha waves represent more abnormal rhythm among intellectually disabled children. These findings are in the line of *Vogel and Broverman (1964)* showed a higher incidence of EEG abnormality among the more severely retarded. They also found a slightly higher incidence of low voltage waking records among retardates at all ages.

CONCLUSION

On the basis of above views it can be said that the present evidence concerning relationships between normal brainwave phenomena and intelligence in children is in support of the previous finding and in the intellectually disabled children are contradictory and inconclusive, there is no significant difference as far as the EEG pattern is concern of average and above average IQ group. The weight of available evidence suggests that there is no difference in normal adults, for their alpha waves, EEG abnormality and decreased intellectual capacity are tend to be related to one another.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Angelakis, E., Lubar J.F., Stathopoulou, S., Kounios,J.,(2004) Peak alpha frequency: an electroencephalographic measure of cognitive preparedness.
- Angelakis, E., Lubar J.F., Stathopoulou, S., Kounios,J.,(2004) Peak alpha frequency: an electroencephalographic measure of cognitive preparedness. Clinical Neurophysiology Vol.115(4):887-897
- Anokhin, A. Vogel, F. (1996) EEG Alpha Rhythm Frequency and Intelligence in Normal Individuals." Intelligence, 23: 1-14)
- Anokhin, A. Vogel, F. (1996) EEG Alpha Rhythm Frequency and Intelligence in Normal Individuals." Intelligence, 23: 1-14)
- Dopplemayr, M. Klimesch, W., Sauseng, P., Holdmoser, K., Stadler W. and Hanslmayr, S. "Intelligence related difference in EEG- bandpower", Neuroscience Ltter, Vol. 381, 2005, pp. 309-313
- Dopplemayr, M., Klimesch, W., Sauseng, P., Holdmoser, K., Stadler W. and Hanslmayr, S. (2005) "Intelligence related difference in EEG bandpower", Science direct: Neuroscience Letters, Vol. 381, pp. 309-313
- Ellingson, R. J., (1966) Relationship between EEG and test intelligence: A commentary.Psychological Bulletin, Vol 65(2), Feb 91-98.
- Ellingson, R. J., and Lathrop, G. H. (1973). Intelligence and frequency of the alpha rhythm. Am. J. Ment. Defic. 78:334–338.
- Ellingson, R. J., and Lathrop, G. H. (1973). Intelligence and frequency of the alpha rhythm.American Journal of Mental Deficiency, Vol 78(3), Nov 1973, 334-338.
- Ellingson, R.J. (1966). Relationship between EEG and test intelligence: A commentary. Psychological Bulletin, 65, 91-98.

Alpha Waves In Relation To Different Intellectual Levels

- Fink, A., Neubauer, A.C., (2006) "EEG alpha oscillations during the performance of verbal creativity tasks: Differential effects of sex and verbal intelligence." *International journal of Psychophysiology* Oct;62(1):46-53.
- Giannitrapani, D. (1985). *The electrophysiology of intellectual functions*. Basel: Karger. S.
- Karger Fink, A., Neubauer, A.C., (2006) EEG alpha oscillations during the performance of verbal creativity tasks: Differential effects of sex and verbal intelligence.
- Giannitrapani, D., (1985) *The Electrophysiology of Intellectual Functions*. Basel, Karger, pp. 2-6 (DOI:10.1159/000409767)
- Jahidin A.H., Taib,M.N., Tahit,N.M., Megat Ali,M.S.A., Lias,S., (2013) Asymmetry Pattern of Resting EEG for different IQ levels.
- Jahidin, A.H., Taib, M.N., Tahir, MD.N., Megat Ali,M.S.A., Lias,S., Fuad,N., Omar, W.R.W. (2012) Brainwave sub-band power ratio characteristics in intelligence assessment. *Control and System Graduate Research Colloquium (ICSGRC)*, 2012 IEEE; 2012 July, pp. 318–321
- Jahidin, A.H., Taib, M.N., Tahir, MD.N., Megat,A.M.S.A., Lias,S., Fuad,N., Omar, W.R.W. (2012) "Brainwave sub-band power ratio characteristics in intelligence assessment".*Control and System Graduate Research Colloquium (ICSGRC)*, 2012 IEEE; July, pp. 318–321
- Jahidin,A.H.,Taib,M.N., Tahir,N.M.,Megat,A.M.S.A., Lias,S., (2013)Asymmetry Pattern of Resting EEG for Different IQ Levels". *Faculty of Electrical Engineering, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia.Science direct,Procedia - Social and Behavioral Sciences*.Vol.97. 246-251.
- Neubauer, A.C. and Fink, A. (2009) "Intelligence and Neural Efficiency: Measures of brain activation versus measures of functional connectivity in the brain", *Journal of Intelligence*, vol. 37 pp. 223-229.
- Neubauer, A.C. and Fink, A. (2009) "Intelligence and Neural Efficiency: Measures of brain activation versus measures of functional connectivity in the brain", *Journal of Intelligence*, Vol. 37(2) pp. 223-229.
- Neubauer, A.C. , Grabner, R.H., Fink A. and Neuper, Christa (2005) "Intelligence and Neural Efficiency: further influence of task content and sex on the brain-IQ relationship", *Journal of Cognitive Brain Research*, Vol. 25, 2005, pp. 217-225.
- Niemiec, A. J. and Lithgow, B.J. (2005) "Alpha-band characteristics in EEG spectrum indicate reliability of frontal brain asymmetry measures in diagnosis of depression" *Annual International Conference of the IEEE EMBS*, 7, 7517-7520.
- Niemiec, A. J. and Lithgow, B.J. (2005) "Alpha-band characteristics in EEG spectrum indicate reliability of frontal brain asymmetry measures in diagnosis of depression" *Annual International Conference of the IEEE EMBS*, 7, 7517-7520.
- Osaka, M., Osaka, N., Koyama, S., Okusa, T., and Kakigi, R. (1999). Individual differences in working memory and the peak alpha frequency shift on magnetoencephalography. *Brain Res. Cogn. Brain. Rev.* 25:365–368.

Alpha Waves In Relation To Different Intellectual Levels

- Osaka, M., Osaka, N., Koyama, S., Okusa, T., and Kakigi, R. (1999). "Individual differences in working memory and the peak alpha frequency shift on magnetoencephalography". *Brain Res* Oct 25;8(3):365-8.
- Posthuma, D., Boomsma et al. (2001) Multivariate genetic analysis of brain structure in an extended twin design. *Behav. Genet.* 30, 311-319 .
- Posthuma, D., Boomsma et al. (2001) "Multivariate genetic analysis of brain structure in an extended twin design". *Behav. Genet.* 30(4), 311-319.
- Schmid, R.G., Tirsch,W.S., Scherb, H., (2002) Correlation between spectral EEG parameters and intelligence test variables in school-age children. *Clinical Neurophysiology.* 2002 Oct;113(10):1647-56.
- Schmid, R.G., Tirsch,W.S., Scherb, H., (2002) Correlation between spectral EEG parameters and intelligence test variables in school-age children.*Clinical Neurophysiology*Oct;113(10):1647-56.
- Thatcher,R.W., North,D., Biver,C., (2005) EEG and intelligence:Relations between EEG coherence,EEG phase delay and power. *Clinical Neurophysiology.* 116 ,2129-2141.
- Thatcher,R.W., North,D., Biver, C., (2005) "EEG and intelligence:Relationship between EEG coherence,EEG phase delay and power". *Clinical Neurophysiology.* Sep;116(9):2129-41.
- Vogel, W., Broverman, Donald M. (1964) Relationship between EEG and test intelligence Database: PsycARTICLES [Journal Article .
- Vogel, W., Broverman, Donald M. (1964) "Relationship between EEG and test intelligence". *Psychological Bulletin*, Vol 62(2),132-144.
- Zietsch B.P., Hansen, J.L. Hansell, N.K. Geffen, G.M. Martin N.G and. Wright M.J, (2007) "Common and specific genetic influence on EEG power bands delta, theta, alpha and beta", *Journal of Biological Psychology*, vol. 75, 2007, pp. 154-164.
- Zietsch B.P., Hansen, J.L. Hansell, N.K. Geffen, G.M. Martin N.G and. Wright M.J, (2007) "Common and specific genetic influence on EEG power bands delta, theta, alpha and beta", *Journal of Biological Psychology*, vol. 75, pp. 154-164.

Relationship between Study Habits and Neo Five Factor Inventory 'S Factors Among Private and Government School Student

Pratibha S. Chouhan^{1*}, Dr. Arpita Kackar²

ABSTRACT

Study habits are habitual way of exercising and practicing abilities for learning they are one of the effective means of systematic development of knowledge, language and personality of an individual. At the other end personality traits are expressed in learning styles which are in turn reflected in learning strategies and study habits. The relationship between study habits and neo five factor inventory's factors among private and government school student was investigated. This is a co relational study. Students of age 17 or above were selected from private and government school. Their study habits and personality traits were assessed through Study habit Inventory and Neo five factor Inventory. Forty students participated in the study. Three factors i.e. extraversion, conscientiousness and openness to experience have significant relationship with study habits. This may be because self discipline, the habit of trying new ideas and altruism have more impact on the ability of individual for learning.

Keywords: Relationship, Study, Habits, Factor, Inventory, 'S Factors, Private and Government School Student

Study habits are habitual way of exercising and practicing abilities for learning, these are one of the effective means of systematic development of language, knowledge and personality of an individual. At the other end personality traits are demonstrated in learning styles which are in turn reflected in learning strategies and study habits. Introverts tended to have better study methods, but this does not completely reason out their high academic performance. N. J. Entwistle, and Dorothy Entwistle (1970). In order to motivate, the students should be offered a small orientation program which must include study habits and personality development. Students may be trained on time management and planning for learning the subjects. Due to better management of time, the students may make themselves occupied in all the co-curricular activities and extracurricular activities. K. Nuvetha Sheebha (2016).

¹ P.G. Student, Department of Psychology, J. N. Vyas University, Jodhpur, Raj., India

² Assistant Professor, J. N. Vyas University, Jodhpur, Raj, India

*Responding Author

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Identifying a relationship between personality type and learning style *Mark D. Threeton & Richard A. Walter (2009)* Two of the Big Five traits, conscientiousness and agreeableness, were positively related with all four learning styles (synthesis analysis, methodical study, fact retention, and elaborative processing), On the other hand neuroticism was negatively related with all four learning styles. Along with that, extraversion and openness were positively related with elaborative processing. *Meera Komarraju. et.al (2011).*

There is an expected negative correlation between Neuroticism and Reading skills. There is a slight correlation between Agreeableness and Reading skills and Conscientiousness and Reading Skills. There is a slight significant relationship between Openness and Reading skills this study demonstrated the association between Reading skills and personality types *Dilshad AkberAli (2012)* Extraverts preferred multiple choice, oral, and group work assessment, while openness was positively associated with essays and oral exams but negatively related with multiple choice and group work. *Adrian Furnham .et.al(2007)* Fast surfing could be related to a surface study approach and emotionality, as well as to low openness to experience and low conscientiousness. Broad scanning was linked to extraversion, openness, and competitiveness, whereas deep diving was a search pattern typical of analytical students with a deep and strategic study approach. *Jannica Heinstrom (2005).* Hence it can be concluded that there exists relationship between study habits and big five factors of personality.

Objectives

1. To understand and explore the relationship between personality traits or the five factors of an individual's personality and the study habits of post secondary school students.

Hypothesis

2. It is hypothesized that on all the factors of NEO FFI and Study habits there will be no significant relationship between private and government school students.

METHODOLOGY

Design

This is a co relational study in which Independent variable is study habits of private and government school students and dependent variable is five factors of personality. In this study controls like similar school environment, same medium of instruction in the school and same age group for the subjects were taken.

Sample

A total of 40 students were selected from both private and government school. Researcher approached 50-50 students of both the groups and explained the research purpose out of which

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20 for each group showed their willingness to participate in the research. Sample was randomly selected irrespective of the gender.

Tools

For assessing the study habits of students the Study Habit Inventory by *Mukhopadhyaya and Sansanwal (1983)*. This five point scale test is apt for identifying the study habits of post secondary students. The reliability coefficient is .91 which is fairly high and indicates that the inventory is fairly high. For assessing the personality type of students NEO-Five Factor Inventory (NEO-FFI) by *Costa and Macrae (1991)* was used. The reliability of the subscales of conscientiousness and neuroticism were 0.83 and 0.80, respectively, and that the subscales of agreeableness and extraversion were acceptable at 0.60 and 0.58, respectively. However, the subscale of openness to experience is not internally correlated (0.39).

RESULT

TABLE A: Highlights the Mean and SD of private and government groups on NEO-FFI and SHI

TRAIT	GROUPS	MEAN	SD
Agreeableness	Private	38.25	4.66
	Government	39.65	7.02
Conscientiousness	Private	45.20	5.60
	Government	49.95	3.89
Extraversion	Private	40.80	5.81
	Government	42.90	5.22
Neuroticism	Private	33.45	4.82
	Government	35.85	7.09
Openness to experience	Private	31.65	6.43
	Government	42.05	5.25
Study habits	Private	128.05	18.74
	Government	121.85	18.33

TABLE B: Highlights the correlation among factors of NEO FFI and study habits. Table indicates product moment correlation of NEO FFI along with SHI.

TRAITS	Agr.	Con.	Ext.	Neu.	O to E	Study Habits
Agreeableness		0.19	0.11	0.15.	0.10	-0.01
Conscientiousness			0.27	-0.14	-0.15	0.01
Extraversion				-0.14	0.001	*-0.298
Neuroticism					0.13	-0.040
Openness to experience						-0.37

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TABLE C: Highlights the correlation among factors of NEO FFI and study habits. Table indicates product moment correlation of NEO FFI along with SHI

TRAITS	Agr.	Con.	Ext.	Neu.	O to E	Study Habits
Agreeableness		0.35	0.21	0.61	0.32	-0.16
Conscientiousness			0.34	-0.01	0.25	**0.42
Extraversion				0.07	0.23	-0.006
Neuroticism					-0.13	-0.17
Openness to experience						*-0.38

Interpretation

The above table A shows that Agreeableness: factor has mean and SD value of 38.25 and 4.65 respectively for private school whereas for government school these values are 39.65 and 7.02 respectively. Conscientiousness: factor has mean and SD value of 45.20 and 5.80 respectively for private school whereas for government school these values are 45.95 and 3.89 respectively. Extraversion: factor has mean and SD value of 40.80 and 5.81 respectively for private school whereas for government school these values are 42.90 and 5.22 respectively. Neuroticism: factor has mean and SD value of 33.45 and 4.82 respectively for private school whereas for government school these values are 35.85 and 7.09 respectively. Openness to experience factor has mean and SD value of 31.65 and 6.43 respectively for private school whereas for government school these values are 42.05 and 5.25 respectively. Study habits have mean and SD value of 128.05 and 18.74 respectively for private school whereas for government school these values are 121.95 and 18.33 respectively.

The above table B shows that agreeableness factor has no significant correlation with rest of the personality factors and as well as with study habits of private group. It indicates that the traits of altruism, self discipline, novelty, outgoing attitude, emotional stability and ability for concentration are not related. The above table B shows that conscientiousness factor has no significant correlation with rest of the personality factors and as well as with study habits of private group. It indicates that the traits of self discipline, novelty, outgoing attitude, emotional stability and ability for concentration and comprehension are not related. The above table B shows that extraversion factor has negative significant correlation with study habits ($r = -0.298$, $P < .05$) and no significant relationship with rest of the personality factors of private group. It indicates that the traits of talkativeness, domineering attitude, task orientation, concentration and reading are negatively correlated. On the other hand the traits of assertiveness, positive energy, novelty and, emotional stability are not related. Neuroticism factor has no significant correlation with factor Openness to Experience and study habits of private group. It indicates that the traits of novelty, adventurous attitude and ability for concentration and comprehension are not related. Openness to Experience factor has no significant correlation with study habits of private group. It indicates that the traits of novelty, adventurous attitude and ability for concentration and comprehension are not related.

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The above table C shows that agreeableness factor is not having significant correlation study habits of government group. It indicates that the traits of altruism, outgoing attitude, modesty and straightforwardness are not related with the traits of concentration, comprehension, task orientation and reading. On the other hand agreeableness factor has significant positive relationship with rest of the personality factors i.e. Conscientiousness($r=0.35$ $P<.01$), Extraversion($r=0.21$ $P<.05$), Neuroticism($r=0.61$ $P<.01$) and Openness to experience($r=0.32$ $P<.01$) It reveals that the traits of modesty, altruism, self discipline assertiveness, emotional stability and novelty are significantly related. Conscientiousness factor has no significant correlation with Neuroticism factor of government group. It indicates that there is no significant relationship between traits of self discipline and emotional stability. On the other hand Conscientiousness factor has significant positive relationship with rest of the factors i.e. Extraversion($r=0.34$ $P<.01$), Openness to Experience($r=0.25$ $P<.05$) and Study habits ($r=0.42$ $P<.01$) of the government group It reveals that the traits of positive attitude, novelty, task orientation and concentration are significantly related..Extraversion factor has positive significant correlation with Openness to experience ($r=-0.23$ $P<.05$) of government group. It indicates that the traits of domineering, attitude, assertiveness, novelty and intellectual curiosity are significantly related. On the other hand Extraversion has no significant relationship with Neuroticism and study habits of government group. It shows that the traits of emotional stability, anxiety, concentration and comprehension are not related. Neuroticism factor has no significant correlation with factor Openness to Experience and study habits of government group It indicates that the traits of novelty, adventurous attitude and ability for concentration and comprehension are not related. Openness to Experience factor has negative significant correlation with study habits of private group.. It indicates that the traits of novelty, adventurous attitude and ability for concentration and comprehension are related.

DISCUSSION

On the basis of analysis of responses given by the respondents on NEO-FFI and Study Habits Inventory it is revealed that some of the previous findings are supported by the present investigation. Estabrook and Sommer (1966) found that more extraverted students preferred to study in a leisure manner. For example, they liked to study in casual spaces, such as on a bed or a couch. Also extroverts took frequent breaks and liked to study in a group setting, while the introverts enjoyed the contrasting habits and settings It also further demonstrated that an individual with a higher score in extraversion had less good study habits. These views are in collaboration with the present findings in which Extraversion factor is correlated to study habits of private group. Furthermore, Conscientiousness is related to work discipline, interest in subject matter, concentration and considering studying as quite easy. Entwistle & Tait (1996) are of the view that Students using the strategic approach are good at organizing their work, managing their time and work hard in their academics. They care about their working conditions and have clear targets for their studies. These views are in line with the results of the present study in which

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Conscientiousness factor is found to be correlated to Study habits of the government group Also Blickle,(1996) highlighted that Openness is related to critical evaluation, searching literature and making relationships (deep approach).Such students have an intrinsic motivation and they look for a personal comprehension independent of the study curriculum(Entwistle,et.al 1988). These views are in the collaboration with the present findings in which Openness to experience is found to be correlated with Study habits of the government group.

CONCLUSION

The present study which aims at investigating “Relationship between Study Habits and Neo-FFI’s Factors among Private and Government School Students’ through the use of Study habit Inventory and NEO –Five factor inventory concludes on the basis of findings that the traits of assertiveness, positive emotions, task orientation and comprehension are significantly correlated in the private group. It is also found out that the traits of self discipline, dutifulness, self actualization, task orientation, concentration, and study sets are significantly correlated for government group.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Ali,A.(2012) Personality Types And Reading: A Co relational Study. Interdisciplinary Journal Of Contemporary Research In Business, Vol 4(8) 25-38.
- Blickle,G(1996) ‘Personality traits ,learning strategies and performance’, European Journal of Psychology, Vol10(5),337-352.
- Costa,TP & McCrae,RR (1991) Revised Neo Personality Inventory (NEO-PIR)and Neo Five Factor Inventory (NEO-FFI) ,Psychological Assessment Resources Inc.
- Entwistle N & Waterston .S (1988), Approaches To Studying And Levels Of Processing In University Students ,British Journal of Educational Psychology,Vol(58),25-265.
- Entwistle ,N & Tait ,H(19996).Approaches and Study Skills Inventory for students .Centre For Research On Learning And Instruction ,University of Edinburg
- Entwistle, N.(1970). The relationship between personality, study habits and academic performance. British Journal of Educational Psychology, Val 40, 132-141.
- Estabrook M & Sommer R ‘The Ecology Study Areas’, Sage Journal of environment and behaviour,Vol.2.no.3,271-280.

Relationship between Study Habits and Neo Five Factor Inventory 'S Factors Among Private and Government School Student

- Furnham, A. (2007) Ability, Demography, Learning Style, And Personality Trait. *Journal Educational psychology*, Vol28 (1), 15-27.
- Heinstrom, J. (2005) Fast Surfing, Broad Scanning And Study Approach On Students' Information Seeking Behaviour. *Journal of Documentation*, Vol 61(2), 228-247.
- Kummaraji, M. (2011) Role Of Big Five Personality Traits In Predicting College Student's Academic Motivation And Achievement. *Personality and Individual Differences*, Vol 51(4), 365-548
- Mukhopadhyaya, M & Sansanwal, D. N (1985) Study habits inventory (SHI), National Psychological Corporation, Kacheri Ghat, Agra- 282004
- Sheebha (2016) A study on relation between study habits and personality traits of higher secondary students. *International Journal of Research Granthaalayah*, Val 4.112-118.
- Threeton, D., & Walter, R. (2009) The Relationship Between Personality Type And Learning Style. *Journal of Industrial Teacher Education*, Vol46 (2-3). 224-238.

Management of Stress, Anxiety and Frustration among Athletes through Muscular Relaxation Technique

Pratibha^{1*}

ABSTRACT

The main aim of present investigation was to find out effectiveness of muscular relaxation technique on stress, anxiety and frustration level of athletes (18-30, Years). The study took place over a period of three months. The investigator had worked with 60 athletes. They were placed into two groups randomly. The first group was experimental group in which, systematic muscular relaxation technique with the help of professionals was applied. Two sessions per week for twenty minutes were given by the expert of muscular relaxation techniques for three months. Before application of muscular relaxation technique, pre assessment was conducted on both experimental and control group. Findings concluded that muscular relaxation technique has greater significant influence in management of stress, anxiety and frustration among athletes. Practicing relaxation techniques can reduce the level of stress, anxiety and frustration among athletes, their lower intensity of stress, anxiety and aggression contribute them to have control over their behaviour.

Keywords: *Stress, Anxiety, Frustration, Muscular Relaxation Technique, Athletes*

Generally, athletes got over anxious and stressed and even over-motivated, before their game and this can have a debilitating affect on their performance during the game (Hillmann, Apparies, Janelle and Hatfield, 2000). The use of Progressive Muscular Relaxation (Muscular Relaxation Technique) and concentrated breathing techniques can help overcome these negative pre-match effects by decreasing arousal to a level that is more suitable for the match situation, thus ensuring that performance is not adversely affected.

Muscular relaxation technique has been shown to have hugely significant long-term effects in sport, particularly with helping to reduce general anxiety and stress, while also helping to increase concentration. A study by Janet Ortiz showed that this technique led to improved putting performance in female golfers, while many others sports have shown tremendous

¹ Research Scholar, Department of Psychology, Jai Narain Vyas University, Jodhpur, India

*Responding Author

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improvements following the use of muscular relaxation technique and other breathing techniques.

Practicing this technique, athletes can have a better understanding of their breathing and they can then implement shorter, concentrated breathing exercises within a match-day context. William & Harris (2001) discovered huge benefits in concentrated breathing in athletes and while it may not be possible to implement a breathing exercise in the middle of a football match for example, there are many scenarios in which the ability to relax through deep breathing can be profound. Breathing techniques are arguably most relevant in sports involving a 'closed skill', where there are fewer 'outside distractions' during a match and there is the time available to take a moment to relax. Even in team sports, there will be times when deep breathing techniques can give an athlete a vital few seconds to ensure they are in the right state of mind to execute a skill effectively.

REVIEW OF RELATED LITERATURE

Pelka, M. et al. (2016) conducted a systematic application of individualized relaxation techniques on sports science students (age 25.22 ± 1.08 years; sports participation 8.08 ± 3.92 h/week). The students were randomly assigned to series of progressive muscle relaxation, systematic breathing, power nap, yoga, and a control condition. Once a week, over the course of five weeks, their repeated sprint ability was tested. Tests (6 sprints of 4 s each with 20 s breaks between them) were executed on a non-motorized treadmill twice during that day intermitted by 25 min breaks. Results revealed significant interaction effects between the relaxation conditions and systematic breathing led to better performances, and therefore, seems to be a suited relaxation method during high-intensity training.

Vincent A. P. et al. (2012) revealed there are positive correlation between imagery and sports performance, meditation and sports performance, progressive muscle relaxation and sports performance, breathing techniques and sports performance. Practicing relaxation techniques can reduce the number of athletes taking drugs to reduce anxiety and enhance performance.

Faasse, K. and Petrie, K.J. (2015) found that stress has been consistently associated with negative health outcomes, including increased rates of heart disease, slower wound healing, and compromised immune function. Interventions designed to improve peoples' ability to cope with stress can improve health outcomes. Such interventions include relaxation training, emotional expression, benefit finding, and cognitive-behavioral stress management and mindfulness-based stress reduction programs. Coping interventions have the potential to improve health outcomes for patients undergoing a stressful illness experience.

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Another study was conducted by *Dolbier, C.L. and Rush, T.E. (2012)* to examine the efficacy of abbreviated progressive muscle relaxation to enhance physiological and psychological functioning among high-stress college students. Participants were undergraduates, 19 years old on average, predominantly female and White, with high Perceived Stress Scale scores. After random assignment, the experimental group demonstrated significantly greater increases in mental and physical relaxation, and normalized high-frequency and decreases in low- to high-frequency HRV ratio. Small effect sizes were observed for anxiety, normalized low-frequency HRV, and cortisol. Analyses of the reliability and clinical significance of these changes indicate trends in the expected direction. Findings of this research indicate an APMR intervention can have significant short-term effects, both reducing detrimental and enhancing beneficial functioning in high-stress college students.

METHODOLOGY

Statement of the Problem

The present investigation attempts to deal with “Management of Stress, Anxiety and Frustration among Athletes through Muscular Relaxation Technique”.

Significance of the Problem

Mood regulation and relaxation are important for athletes, it has been postulated that certain mood patterns are advantageous for athletes' performance. Successful performance is associated with above average vigor scores and below average negative mood scores. The technique involves tightening and relaxing specific muscle groups so that the athlete identifies the sensations of muscle tension and muscle relaxation in that body part. This results in a reduction in muscle tension, stress, anxiety as well as level of frustration. When this technique is used regularly in training it can lead to significant improvement in training and playing skills and abilities of athletes.

Conceptual Clarifications

- **Stress:** A feeling of strain and pressure. It may lead to bodily harm. Stress can increase the risk of strokes, heart attacks, ulcers, dwarfism, and mental illnesses such as depression.
- **Anxiety:** Anxiety is an emotional state, represented by a feeling of dread, apprehension or fear. In humans, this can be defined by description using language; in animals, it must be inferred from behavioral observations.
- **Frustration:** It is a common emotional response/reaction to opposition. Related to anger and disappointment, it arises from the perceived resistance to the fulfillment of individual will.
- **Muscular Relaxation Technique:** Progressive Muscle Relaxation deals with relaxing muscles. This exercise helps to lower the level of tension and stress levels, and helps to

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relax when feeling anxious. It also helps to reduce physical problems such as stomachaches and headaches, as well as improves sleep.

Objectives

1. To examine and evaluate effectiveness of muscular relaxation technique among athletes.
2. To examine and evaluate effectiveness of muscular relaxation technique among athletes with reference to stress, anxiety and frustration.
3. Make recommendations for the focus and development of future research among young athletes.

Hypotheses

1. Application of Muscular Relaxation Technique will reduce level of stress among athletes in experimental group (H_a1).
2. Application of Muscular Relaxation Technique will reduce level of anxiety among athletes in experimental group (H_a2).
3. Application of Muscular Relaxation Technique will reduce level of frustration among athletes in experimental group (H_a3).
4. There will be no significant mean difference between pre and post assessment scores of control group with reference to level of stress, anxiety and frustration (H_01).

Research Design

Present research is a field experimental study in which pre and post experimental design was used. Further, divided into experimental and control group purposively. In the experimental group, level of stress, anxiety and frustration of athletes were assessed prior to application of muscular relaxation technique. In the same way, level of stress, anxiety and frustration of athletes were measured after the application of muscular relaxation technique whereas in control group same traits of athletes were measured without application of muscular relaxation techniques. Difference between these two relaxation sessions revealed the effect of muscular relaxation techniques on athletes. Muscular relaxation technique was used as an independent variable whereas change in level of stress, anxiety and frustration were dependent variable.

Experimental Group

Pre Assessment	Application of Muscular Relaxation Technique	Post Assessment
<ul style="list-style-type: none">• Level of Stress• Level of Anxiety• Level of Frustration	Two Sessions per week of 20 minutes for first 3 months	<ul style="list-style-type: none">• Level of Anxiety• Level of Stress• Level of Frustration

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Control Group

Pre Assessment		Post Assessment
<ul style="list-style-type: none">• Level of Stress• Level of Anxiety• Level of Frustration	Muscular relaxation technique was not applied	<ul style="list-style-type: none">• Level of Anxiety• Level of Stress• Level of Frustration

Control

Variables related to Subject, Sequence as well as Situation was controlled up to its maximum level thorough selection process, homogeneous sample in respect to their age, socio-economic status and educational standard were selected. All the tests were administered in a particular sequence.

Sample

For the present research work, researcher has selected a sample of 60 athletes, age group between 18 to 30 years, randomly consisting of both males and females from Jodhpur district. Total sample was divided into two groups i.e. experimental (30) and control (30). Further, both experimental and control group were assigned equal number of male and female athletes.

Tools

1. Personal Stress Source Inventory by Singh, A.K., Singh A.K. and Singh A. (2004)

Perceived personal stress was measured through Manual for Singh Personal Stress Source Inventory (SPSSI). A total of 35 statements were used to measure the perceived personal stress. These statements were measured on a 3-point scale (seldom, sometimes, and frequently). Higher the score, the higher is the magnitude of personal stress. Similarly, lower the score, the lower is the magnitude of personal stress. The maximum score on PSSSI is 105.

2. Sinha's Comprehensive Anxiety Test Scale by Sinha, A.K.P. and Sinha, L.N.K. (2007):

Sinha's Comprehensive Anxiety Test (SCAT) is used for determining comprehensive Anxiety. Total 90 items which fulfilled the criterion constituted the test in its final form. The test can be scored accurately by hand and no scoring key or stencil is provided. For any response indicated as 'Yes', the testee should be awarded the score of one, and zero for 'No'. The sum of the entire positive or yes responses would be the total anxiety score of the individual.

3. Frustration Scale by Chauhan and Tiwari (1972)

This test consists of 40 items out of which each four modes that are Regression, Fixation, Resignation and Agression of frustration has 10 items each. Each item having six possible response choice with 0 (Zero) representing absence of the corresponding mode of frustration and the intensity to be indicated from 1- very less, 2-less, 3- ordinary, 4-much

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and 5- very much. The higher scores indicated higher frustration potential, employed to identify the effects of frustration upon the quality of the person's behaviour as a whole.

DATA COLLECTION PROCEDURE

The study took place over a period of three months. The investigator had worked with 60 athletes. They were placed into two groups randomly. The first group was experimental group in which, systematic muscular relaxation technique with the help of professionals was applied. Two sessions per week for twenty minutes were given by the expert of muscular relaxation techniques for three months. Before application of muscular relaxation technique, pre assessment was conducted on both experimental and control group.

In the second group, which was control group, muscular relaxation technique was not applied. Other activities of the athletes were same as their daily routine. After the completion of three months' schedule, athletes of both the groups i.e. experimental as well as control group were administered for post assessment process through the tools used for pre assessment process.

Scoring

Scoring was made as per the respective manuals used for assessment.

Statistical Analysis

In the present investigation, to find out the significant difference between pre and post assessment of athletes, Mean, SD and Paired sample 't' test were calculated between scores of pre & post test sessions.

RESULT AND DISCUSSION

Table 1:- Showing Mean, SD & 't' values between pre & post test scores of athletes for experimental group on various parameters

Parameters	Sessions	Mean	N	S.D.	't'	Sig. Level
Stress	Pre-test	71.56	30	13.14	4.47	$p < .01$
	Post-test	57.50	30	11.50		
Anxiety	Pre-test	68.60	30	8.91	6.84	$p < .01$
	Post-test	51.63	30	11.22		
Regression	Pre-test	39.60	30	6.88	1.80	NS
	Post-test	37.96	30	7.57		
Fixation	Pre-test	38.66	30	5.41	4.05	$p < .01$
	Post-test	34.63	30	5.25		
Resignation	Pre-test	35.96	30	6.87	4.97	$p < .01$
	Post-test	31.26	30	5.33		
Aggression	Pre-test	44.83	30	4.74	5.83	$p < .01$
	Post-test	37.96	30	5.26		

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It may be inferred from table 1.1 that scores of both the session i.e. pre and post test have significant difference on stress level of athletes. Calculated 't' value is to be found significant ($t=4.47, p<.01$). Mean score of pre test and post test are 71.56 (SD=13.14) and 57.50 (SD=11.50) respectively. On the basis of significant mean difference it can be said that Muscular relaxation technique play significant role in reduction of stress level of athletes. Thus Ha1 (*Application of Muscular Relaxation Technique will reduce level of stress among athletes in experimental group*) is maintained. It means they become more capable in managing stress after getting Muscular relaxation sessions.

It is evident from Table 1.2 that significant difference is to be found between pre and post test sessions of athletes on anxiety level in experimental group. Mean score of pretest and post test are 68.60 (SD=8.91) and 51.63 (SD=11.22) respectively. 't' ratio is reported significant ($t=6.84, p<.01$). On the basis of this significant difference conclusively one can say that presentation of scheduled muscular relaxation technique have significant impact on anxiety level of athletes. Thus Ha2 (*Application of Muscular Relaxation Technique will reduce level of anxiety among athletes in experimental group*) is sustained.

A perusal of table 1.3 highlighted that the two sessions are under study i.e. scores of pretest session and post test session do not differ significantly on frustration dimension regression. 't' value and mean scores for regression, in which mean difference is to be found insignificant ($t=1.80, p>.05$). Athletes scored mean scores (M=39.60, SD=6.88) in post test and pre test (M=37.96, SD=7.57) respectively. On the basis of insignificant mean difference it may be said that muscular relaxation technique has less impact on frustration dimension regression. It means very less behavioural changes were perceived in terms of being finicky about foods, lack of self-control, homesick when away from home, crying easily, defective speech, excessive day-dreaming, exorbitantly ambitious among athletes.

When 't' test was applied to check the impact of muscular relaxation technique on frustration trait fixation, Mean score of pre test and post test differ significantly with each other on frustration dimension fixation. The calculated paired sample 't' value is significant ($t=4.05, p<.01$). The mean value obtained in pre test and post test sessions for fixation are M=38.66 (SD=5.41) and M= 34.63 (SD=5.25) respectively. It can be concluded that muscular relaxation technique has greater significance in behavioural management of such characteristics limitations of all needs, no plan, no definite relation to future, a withdrawal tendency from social contacts, longing for loneliness, no social type of hobby, retreatism, returning within one's self, day dreaming, lack of interest in his surroundings etc.

It is clearly observed from Table 1.5 that significant mean difference is to be reported between pre and post test scores of athletes on frustration dimension resignation in experimental group.

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Mean score of pretest and post test are 35.96 (SD=6.87) and 31.26 (SD=5.33) respectively. 't' ratio is reported significant ('t'= 4.97, $p<.01$). On the basis of this significant difference conclusively one can say that application of scheduled muscular relaxation sessions have significant impact on frustration dimension resignation among athletes. Behavioural characteristics like more or less rigidly, compulsive in many activities and stereotyped were decreased because fixative behaviour seriously blocks the acquisition of new forms of adjustment and have difficulty in forming new attachments developing new interest or adaptations among athletes.

It is evident from Table 1.6 that significant difference was revealed between pre and post test scores of athletes on frustration dimension aggression in experimental group. Mean score of pretest and post test are 44.83 (SD=4.74) and 37.96 (SD=5.26) respectively. 't' ratio is reported significant ('t'= 5.83, $p<.01$). On the basis of this significant difference conclusively one can say that presentation of scheduled muscular relaxation technique have significant impact on aggression of athletes. It reveals that behavioural traits in terms of rude answering to elders, irritation, feeling of unfairness, carrying grudges, frequent quarrelling, broken engagement, impulse to take revenge and reactionary attitudes to traditions or beliefs were appropriately managed by athletes after relaxation sessions. Thus Ha3 (*Application of Muscular Relaxation Technique will reduce level of frustration among athletes in experimental group*) is partly accepted and partly rejected. It is maintained with reference to frustration trait like fixation, resignation and aggression whereas discarded with regression.

Table 2:- Showing Mean, SD & 't' values between pre & post test scores of athletes for control group on various parameters

Parameters	Sessions	Mean	N	S.D.	't'	Sig. Level
Stress	Pre-test	72.33	30	12.17	1.19	NS
	Post-test	69.60	30	8.42		
Anxiety	Pre-test	69.65	30	8.41	1.16	NS
	Post-test	68.36	30	8.05		
Regression	Pre-test	39.53	30	7.03	1.76	NS
	Post-test	37.43	30	7.68		
Fixation	Pre-test	39.63	30	4.93	1.90	NS
	Post-test	38.03	30	5.45		
Resignation	Pre-test	36.93	30	6.70	1.42	NS
	Post-test	35.76	30	6.57		
Aggression	Pre-test	44.83	30	4.74	1.45	NS
	Post-test	43.90	30	3.74		

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The findings can very well be analyzed from Table 2.1 to 2.6 that insignificant mean differences are to be found in control group for various parameters i.e. stress anxiety and frustration (regression, fixation, resignation and aggression) of athletes. For the parameter level of stress, mean scores of pre test and post tests are $M=72.33$ ($SD=12.17$) and $M=69.60$ ($SD=8.42$) respectively. 't' value is also to be found insignificant. ($t'=1.19, p>.05$). By the same point of view table also indicate that mean value obtained by control group on anxiety in pre and post tests are $M=69.65$ ($SD=8.41$) and $M=68.36$ ($SD=8.05$). Difference between both the mean scores is to be found insignificant ($t'=1.16, p>.05$). Similarly, in both pre and post sessions, control group have obtained mean score for frustration area regression are $M=39.53$ ($SD=7.03$) and $M=37.43$ ($SD=7.68$) respectively. Insignificant ('t') value is obtained ($t'=1.76, p>.05$)

As again mean score of pre and post test for control group on frustration area fixation are $M=39.63$ ($SD=4.93$) and $M=38.03$ ($SD=5.45$) respectively. Calculated 't' ratio is to be found insignificant ($t'=1.90, p>.05$) whereas insignificant mean difference was observed for frustration dimension resignation ($t'=1.42, p>.05$). In the same way last dimension of frustration i.e. aggression is also to be found insignificant ($t'=1.45, p>.05$).

On the basis of above insignificant mean differences one can say that athletes of control group are by and large similar on scores of pre and post test sessions. Hence, *H01 (There will be no significant mean difference between pre and post assessment scores of control group with reference to level of stress, anxiety and frustration)*. Relaxation techniques play vital role in behavioural management of athletes. Athletes express aggression and feel stress and anxiety more at lower level, their lower intensity of stress, anxiety and aggression contribute them to have control over their behaviour.

CONCLUSION

The study indicated that how the athletes had significant improvement in the test scores as evaluated by their post-test assessment. Muscular relaxation technique was presented with the help of professionals as a management process of stress, anxiety and frustration. Anxiety stress and frustration, as negative emotion, affect perceptions in sports competitions, where a large majority of athletes consider Anxiety stress and frustration to be debilitating towards performance, which may result in decreases in performance. Several researches on Anxiety, stress and frustration among athletes indicated that athletes take drugs to combat anxiety and enhance performance. Progressive muscle relaxation technique is a influential technique to reduce the, respiration, blood pressure, muscle tense, anxiety, frustration and negative thoughts (Anshel, 2003; Keable, 1989; Nelson-Jones, 2003).

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Anshel, M.H. 2003. Sport psychology: from theory to practice. New York: Benjamin Cummings.
- Chouhan, N.S. and Tiwari, G.P. Manual of Frustration Scale. Agra: Agra Psychological Cell; 1972.
- Dolbier, C.L. and Rush, T.E. (2012). *Efficacy of abbreviated progressive muscle relaxation in a high-stress college sample*. International Journal of Stress Management. Vol.19 (1):48-68.
- Faasse, K. and Petrie, K.J. (2015). *Stress, Coping and Health*. International Encyclopedia of the Social and Behavioural Sciences. 2nd Ed. Published by Elsevier Ltd.
- Hillman, C.H., Apparies, R.J., Janelle, C.M., & Hatfield, B.D. (2000). *An electrocortical comparison of executed and rejected shots in skilled marksmen*. Biological Psychology, 52, 71-83.
- Keable, D. 1989. The management of anxiety: A manual for therapists. London: Churchill Livingstone.
- Knight, C. (2013). Applied Sports Psychology. Retrieved from <http://believeperform.com/performance/relaxation-in-sports>, 02.10.2016.
- Nelson-Jones, R. 2003. Basic counseling skills: A helper's manual. London: Sage
- Ortiz, J. and LaGarange, L. (2006). *Efficacy of relaxation techniques in increasing sport performance in women golfers*. The Sport Journal published by United States Sports Academy in contemporary sports issue.
- Pelka, M., Kölling, S., Ferrauti, A., Meyer, A., Pfeiffer, M. and Kellmann, M. (2016). *Relaxation techniques in sports: A systematic review on acute effects*. Journal of Sports Science. <http://dx.doi.org/10.1080/02640414.2016.1161208>
- Sapolsky, Robert M. (2004). Why Zebras Don't Get Ulcers. 175 Fifth Ave, New York, N.Y.: St. Martins Press. pp. 37, 71, 92, 271.
- Singh, A.K., Singh A.K. and Singh A. (2004). Personal Stress Source Inventory. National Psychological Corporation, Agra.
- Sinha, A.K.P. and Sinha, L.N.K. (2007). Sinha's Comprehensive Anxiety Test (SCAT). National Psychological Corporation, Agra (U.P.), India.
- Vincent A. P., Yahaya M., Julinamary P., Nagoor M. A. (2014). *The relationship between relaxation techniques and sport performance*. Universal Journal of Psychology. 2(3): 108-112.
- Williams, J. M., & Harris, D. V. (2001). *Relaxation and energizing techniques for regulation of arousal*. In J. M. Williams (Ed.), Applied sport psychology: Personal growth to peak performance, 4th edn (pp. 229–246). Mountain View, CA: Mayfield.
- Yadav, R. (2015). *Test anxiety-trauma for students* IRJMST, International Research Journal of Management Sciences & Technology, (Vol.6).

Effectiveness of Implementation of Inclusive Education for Visually Challenged Children under Various Modes in Jodhpur City

Ravi Shrivastava^{1*}

ABSTRACT

Inclusive education is latest plan for 21st Century. It is emphasizing under plan and perspectives to teach special children as far as possible under general schools. After implementation of Sarva Siksha Abhiyan, the concept of inclusion has replaced in place of integration. Present paper study the implementation of effectiveness of inclusive education for visually challenged children under various modes in Jodhpur city. The aim of study was to analyse the attitude of general as well as special children, general teacher as well as special teacher and administrators of both government and non – government sectors towards the implementation of inclusive education. The sample of the present investigation consisted of 20 general children, 20 special children, 20 general educator, 20 special educator, 5 administrator of government sector and 5 administrator of non – government sector. Self – made attitude scale was used for data collection. The obtained data were subjected to necessary statistical computation. The data were mainly analysed in terms of percentage, average and t – Analysis. It was found that attitude wise there is no difference among children, teachers and administrators. Finding of study reveals that though hypothesis may be accepted yet it can't be said that process of implementation is effective. Due to lack of proper coordination and cooperation between Government and Non – Government sector process has many hurdles and target of zero rejection policy is yet not achieved.

Keywords: *Inclusive Education, Visually, Children, Jodhpur City*

Inclusive education in the current context typically means “that students with disabilities are served primarily in the general education settings, under the responsibility of a regular classroom teacher. When necessary and justifiable, students with disabilities may also receive some of their instruction in another setting, such as a resource room” (*Mastropieri & Scruggs, 2004*). Inclusive Education denotes that all children irrespective of their strengths and weaknesses will be part of the mainstream education. The feeling of belongingness among all community members – teachers, students and other functionaries is developed through inclusive education.

¹ Research Scholar, Vardhman Mahaveer Open University, Kota, India

*Responding Author

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Inclusive education is for all, irrespective of any social community, caste and class gender and disability of the child.

The concept of inclusion has been finding its reference in many national education documents in the post independent period. The article 45 of the Constitution of India is assuring better services to person with disabilities. The Education Commission report (1964 – 1966) recommended placement of the disabled child as far as possible in ordinary schools. The national policy on education, 1986 include a full chapter on education of the handicapped and formulated guideline for action. The phrase “inclusive education” has attracted much attention in recent years. After the implementation of Person with Disabilities Act 1995, education of disabled child is considered as the right of child rather than a welfare activity.

In developing countries where there are growing numbers of visually impaired children, inclusion can be apparent as a substitute to reach out children who are not yet reached. The EFA Global monitoring report estimated that one – third of the 77 million children who are still out of school have disability. The report recommended that inclusive education should be the top priority if government wants to achieve EFA. In India, considerable work has been done over the years for the growth of education of special children. It is, however, faced with several problems like limited coverage, lack of qualified teachers etc. The problem of India in inclusion is not in policies and models but in expansion, it is indicating that we might have some sort of problem in the process of implementation. The present study is expected to throw light on process of implementation of inclusive education for visual impaired children through various modes in Jodhpur. It is also hoped that the findings of the study may give direction for further research in this area.

OPERATIONAL DEFINITION

1. Effectiveness

Effectiveness is the capability of producing a desired result. When something is deemed effective, it means it has an intended or expected outcome, or produces a deep, vivid impression.

2. Inclusive Education

Inclusive education is a system in which we impart education to children with special need in general school with development of environment all favourable to the needs of special children.

3. Blindness

Blindness refers to a condition where a person suffers from any of the following condition:-

- a. Total absence of sight.
- b. Visual acuity not exceeding 6/60 or 20/200 (Snellen) in better eye with the best possible correction.
- c. Field of visual subtending an angle of 20 degree or worse.

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4. Low Vision

“Markedly reduced functional vision” is referred to as low vision.

The World Health Organization (1992) defines ‘Low Vision’ as follows:-

“A person with low vision is one who has impairment of visual functioning even after treatment and / or standard refractive correction and has a visual acuity of less than 6/18 to light perception or a visual field of less than 10 degree from the point of fixation, but who uses, or its potentiality able to use vision for the planning and / or execution of a task”.

Statement of the Problem

“Study of Effectiveness of Inclusive Education for Visually Challenged Children under Various Modes in Jodhpur”

Rational of the Study

1. The study will help to know the feelings of visually impaired person towards implementation of inclusive education.
2. The study will be of immense use for understanding of major issues and challenges in the way of implementation of inclusive education.
3. The study will also throw the light on the use of sighted people.
4. It will suggest way for better implementation.
5. It will bring attention of administration.

Objectives

1. To develop tools for measuring attitudes of educators and administrators of government and non – government organizations as well as effective implementation of inclusive education for visually challenged children.
2. To study the effective implementation of inclusive education for visually challenged children.
3. To identify factors which, effects implementation of inclusive education for visually challenged children.
4. To study attitude of educators or administrators of government as well as NGOs.

Hypotheses

1. There will be significant difference among attitude of government and non–government educators or administrators.
2. Implementation of inclusive programme for visually challenged children will be more effective in Government Organizations as compared to Non–Government Organizations.

METHODOLOGY

Sample

In this study the investigator selected Jodhpur City for collection of data from general children as well as visually challenged children, general educator as well as special educator and administrators from government as well as non-government institutions. The sampling method was purposive and non – probability sampling.

Design:

The sample consist of 20 visually challenged children as well as 20 general children, 20 special educators as well as 20 general educators and 5 administrators from each government and non – government organization.

Tools:

Two questionnaire was developed, one for measuring attitude of special and general children, general educators and special educators and another questionnaire for measuring attitude of government and non – government organizations administrators.

Development of Tool:-

The aim of study is to find out views about implementation of inclusive education for visually challenged children under various modes in Jodhpur city. For this purpose, investigator developed questionnaire which consists two part, one part contain demographic information and second part contains different statements for measuring attitude of children, educators and administrators.

The questionnaire for children and teachers consist of 30 closed ended statements whereas questionnaire for administrators consists of 40 closed ended statements. The responses were rated on a three point rating scale as agree, disagree and not sure.

Validation of Questionnaire:-

Face validity was established by giving the check list to 15 professionals who have adequate experience of working with visually challenged children to rate on three point scale. All professionals accepted the given statements of questionnaire.

Scoring:

Statement Response	Positive	Negative
Agree	3	1
Not Sure	2	2
Disagree	1	3

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Research Method:

In order to achieve the objective of study, the investigator adopted descriptive method. The present study is surveying the views and measuring attitude of children, educators and administrators towards implementation of inclusive education under various modes for visually challenged children in Jodhpur city.

Statistical Techniques:-

The data were mainly analysed in terms of percentage analysis, mean and standard deviation. The 't' test was used to find out the significance of differences. To find out the level of significance, the calculated t values were compared with the table values.

RESULT AND DISCUSSION

Table 1: Showing Mean, SD and 't' values for various categories for attitude towards implementation of inclusion.

Variable		Category	N	Mean	SD	t – value	Significance Level
Gender	Male	Special	11	68.27	5.04	2.27	$p < .05$
		General	12	62.83	5.88		
	Female	Special	9	68.44	6.36	0.54	$p > .05$
		General	8	66.75	5.65		
Age	10 – 15	Special	7	70.42	5.85	1.61	$p > .05$
		General	11	65.09	6.83		
	Above 15	Special	13	67.23	5.24	1.45	$p > .05$
		General	9	63.55	6.07		
Education	Upto 10	Special	14	68.42	5.60	1.18	$p > .05$
		General	12	65.58	6.19		
	Above 10	Special	6	68.16	5.81	1.35	$p > .05$
		General	8	62.62	7.79		

Table 1 indicates as per the gender, mean values of special and general male children are 68.27 and 62.83, SD values of special and general children are 5.04 and 5.88. t – value is 2.227 ($P < 0.05$), which indicates highly significant difference among male. This difference might be due to non acceptance of general children for children with visual impairment. In case of female, mean values of special and general children are 68.44 and 66.75, SD values in special and general children are 6.36 and 5.65. t – value is 0.54 ($P > 0.05$), which indicates non significant difference among female children.

As per age of 10 – 15 years, mean values of special and general children are 70.72 and 65.09, SD values of special and general are 5.85 and 6.83. t – value is 1.61 ($P > 0.05$), which indicates non significant difference. In case of age above 15, mean values of special and general children are

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67.23 and 63.55, SD values are 5.24 and 6.07. t – value is 1.45 ($P>0.05$), which indicates non significant difference.

As per education upto 10th, mean values of special and general children are 68.42 and 65.58, SD values are 5.60 and 6.19. t – value is 1.18 ($P>0.05$), which indicates non significant difference. In case of above 10th, mean values of special and general children are 68.16 and 62.62, SD values are 5.81 and 7.79. t – value is 1.35 ($P>0.05$), which indicates non significant difference.

Table 2: Showing Mean, SD and ‘t’ value for Attitude of General and Special Educators for various categories.

Variable		Category	N	Mean	SD	t – value	Significance Level
Gender	Male	Special	14	66.21	5.64	0.76	$p>0.05$
		General	11	66.45	4.58		
	Female	Special	6	62	5.35	1.25	$p>0.05$
		General	9	65.22	3.97		
Age	20 – 35	Special	6	65.5	4.54	0.55	$p>0.05$
		General	5	64.2	1.67		
	Above 35	Special	14	63.92	8.91	0.44	$p>0.05$
		General	15	65.13	4.86		
Experience	0 – 10	Special	6	65	2.71	0.04	$p>0.05$
		General	11	64.9	6.13		
	Above 10	Special	14	64.78	4.84	1.03	$p>0.05$
		General	9	67.22	5.88		

Table 2 reported the mean values of special and general male educators are 66.21 and 66.45, SD values of special and general educators are 5.64 and 4.58. t – value is 0.76 ($P>0.05$), which indicates non significant difference among male. In case of female, mean values of special and general educators are 62 and 65.22, SD values in special and general educators are 5.35 and 3.97. t – value is 1.25 ($P>0.05$), which indicates non significant difference among female educators.

As per age of 20 – 35 years, mean values of special and general educators are 65.5 and 64.2, SD values of special and general are 4.54 and 1.67. t – value is 0.55 ($P>0.05$), which indicates non significant difference. In case of age above 35, mean values of special and general educators are 63.92 and 65.13, SD values are 8.91 and 4.86. t – value is 0.44 ($P>0.05$), which indicates non significant difference.

As per experience 0 – 10 years, mean values of special and general educators are 65 and 64.9, SD values are 2.71 and 6.13. t – value is 0.04 ($P>0.05$), which indicates non significant difference. In case of above 10 years, mean values of special and general educators are 64.78 and 67.22, SD values are 4.84 and 5.88. t – value is 1.03 ($P>0.05$), which indicates non significant difference.

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Table 3: Showing Mean, SD and 't' value for Attitude of Government and non – Government administrators for various categories

Variable	Category	N	Mean	SD	t – value	Significance Level
Gender	Male	6	96.17	6.31	1.01	$p>0.05$
	Female	4	92	4.74		
Age	Under 40	4	96	12.25	0.44	$p>0.05$
	Above 40	6	93.5	1.61		
Experience	Less than 15	3	93.33	13.09	0.28	$p>0.05$
	Above 15	7	95	3.96		

Table 3 indicates mean, standard deviation and t – values as per the gender, mean values of government and non – government administrators, male and female are 96.17 and 92, SD values are 6.31 and 4.74. t – value is 1.01 ($P>0.05$), which indicates non significant difference among administrators.

As per age of under 40 years and above 40, mean values are 96 and 93.5, SD are 12.25 and 1.61. t – value is 0.44 ($P>0.05$), which indicates non significant difference.

As per experience less than 15 and above 15 years, mean values are 93.33 and 95, SD values are 13.09 and 3.96. t – value is 0.28 ($P>0.05$), which indicates non significant difference.

Finding of study reveals that as per the t – analysis, we have no significant difference among children, educators and administrators. On the basis of percentage, investigator likes to highlight following key points:-

1. Almost all administrators have accepted that the goal of EFA is still not achieved and children with visual impairment are not in mainstreaming.
2. Only 20 per cent agree that we have accessibility in schools for visually challenged children.
3. Only 15 per cent agree with that visually challenged children are getting equal opportunity as far as concerned with education.
4. 40 per cent administrators are still lacking knowledge about integration and inclusion.
5. Only 30 per cent administrators agree that we have ample infrastructure.
6. 90 per cent administrators agree with this that for better implementation, there must be cooperation between Government and Non – Government sector.
7. 80 per cent were agreeing that lack of special educator is a great hurdle in the process of implementation of inclusive education.
8. 80 per cent were agreeing that the target of zero rejection policy is not achieved.
9. Only 30 per cent were agreeing that NGOs are performing well.
10. 80 per cent were agreeing that in Government sector, financial resources are not being utilised properly.

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11. 80 per cent were agreeing that the implementation of legal provision is not applying in practise for VICs in real life.
12. 90 per cent were agreeing that lack of expertise knowledge is a hurdle in way of implementation.
13. Most of administrators were disagreeing about following of missionary concept.
14. 80 per cent were disagreeing that fare remuneration is given to special educator though 90 per cent were agreeing that duty of special educator is tough.

SUGGESTIONS

Investigator likes to give following suggestions:-

- Separate identification should be done for low vision children.
- Low vision children should be taught by utilizing appropriate methodology.
- Accessibility must be developed for visually challenged children in general school.
- At least one special educator must be appointed in each general school.
- Fare remuneration must be paid to special educators.
- Implementation must be done under supervision of experts of special education.
- Pre skill for visually challenged children must be developed.
- Administrators must be trained.
- Inclusive education must be implemented.
- Proper co – ordination and co – operation must be developed among Government as well as Non – Government sector.

CONCLUSION

We can summarise that we have several hurdles in the way of implementation, due to subjectivity, we cannot generalize the result. We can say that the process of implementation has serious drawbacks and neither NGOs nor Government is doing 100 per cent well due to not proper coordination and cooperation. Hypothesis may be accepted but we cannot say that implementation is effective.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Advani. L. (2002) *Education a Fundamental Right of Every Child Regardless of His / Her Special Needs: Journal of Indian Education*; Special Issue on Education of Learners with Special Needs, New Delhi, NCERT

Effectiveness of Implementation of Inclusive Education for Visually Challenged Children under Various Modes in Jodhpur City

Ainscow, M. (1991) *Effective Schools for All*, London: David Fulton Publishers

Ainscow, M. (2005) *From Special Education to Effective Schools for All*, Keynote presentation at the Inclusive and Supportive Education Congress 2005, University of Strathclyde, Glasgow

Lindsay Giffard, K (2007) *Inclusive Education in India: Interpretation, Implementation and Issues*, *CREATE PATHWAYS TO ACCESS*, Research Monograph No 15, Sep 2007 at the web link http://www.create-rpc.org/pdf_documents/PTA15.pdf

Mastropieri, M.A., & Scruggs, T.E. (2004). *The inclusive classroom: Strategies for effective instruction*. NY: Pearson

A Comparative Study of Adjustment Level of Government and Private School Students

Seema Khichi^{1*}

ABSTRACT

In present scenario private educational institutions emerged as strong as government institutions whereas at some places they overcome government institutions. Previous study has reported that adjustment level between private and government school students Hussain and Hussain (2008) found in their study that magnitude of academic stress was significantly higher among the public school Devika (2013) explored that significant difference exists in the emotional adjustment of boys and girls. On the contrary some researchers reported that there is no significant difference for adjustment between the private and government school students Makwana and Kaji (2014) and Paramanik Saha and Mondal (2014). On the basis of above views an attempt is made to find out pattern of adjustment level among private and government school students in which independent variable is taken private and government school set up and dependent variable is pattern of adjustment level. Overall 120 students from both private and government school have taken part in the research. Adjustment level was measured with the help of Sinha and Singh's adjustment inventory (2005) for school students (AISS). Findings indicate that there is no significant difference between the two group studies hence the null hypothesis is confirmed.

Keywords: *Adjustment, Government and Private School*

In present scenario private educational institutions emerged as strong as government institutions where as at some places they overcome government institutions. In present investigation and attempt is made to find out how government and private school setup effect the adjustment process of the students. As previous studies has showing that academic stress and adjustment among high school students found that magnitude of academic stress was significantly higher among the public school students, where as government school students were significantly better in terms of their level of adjustment Hussain & Hussain, (2008). Mildred (2011) reported that there were no significant difference between girls and boys in school adjustment. Yellaiah, 2012 reported academic achievement of high school students and concluded that adjustment and academic achievement cause significant difference between male and female students.

¹ P.G. Student, Department of Psychology, J. N. Vyas University, Jodhpur, Raj., India

*Responding Author

A Comparative Study of Adjustment Level of Government and Private School Students

Government and private school students and rural and urban school students do not cause any significant difference between adjustment and academic achievement. Devika, (2013) concluded a comparative study of the adjustment of secondary school students and analyzing which reveal that level of adjustment of secondary school students is average. They also found that significant difference exists in the emotional adjustment of boys and girls and no significant difference was found between male and female. On the contrary some researchers reported that there is no significant difference for adjustment between the private and government school students. This view supported by Makwana (2013), Paramanik, Saha & Mondal (2014), Makwana & Kaji (2014). Makwana, 2013 investigated adjustment of the secondary school students among urban and rural area Ahmedabad District and results shows that there is no significant difference. Paramanik, Saha & Mondal, 2014 conducted a study on adjustment of secondary school students with respect to gender and residence and study revealed that there is no significant difference between adjustment level of students residing at urban and rural area. Makwana & Kaji, 2014 conducted a study on adjustment of secondary school students in relation to their gender and result shows that there is no significant difference in home, school and emotional adjustment of boys and girls secondary school students but there is significant difference in social adjustment of boys and girls secondary school students.

Problem

Comparative study of adjustment level of government and private school students. On the basis of above view, following problem is undertaken. This problem is further spell out as follows:

1. What is the pattern of adjustment problem amongst government school students?
2. What is the pattern of adjustment problem amongst private school students?
3. What is the difference between the pattern of adjustment of government school and private school students?

Hypothesis

There will be no difference in adjustment process on all the three areas i.e. social, educational and emotional between government and private school students. This hypothesis is based on Hussain & Hussain (2008), Adhiambo Mildred (2011), Yellaiah, 2012, Devika (2013), Makwana (2013), Paramanik, Saha & Mondal (2014), Makwana & Kaji (2014)

METHODOLOGY

Research Design

In such studies the researcher is free to recite independent and dependant variable of study (Lewin 1979). It is a field experiment in which Government and private school setup is taken as set of independent variables whereas pattern of adjustment is taken as dependant variable. Extraneous variables were controlled through matching the age, social educational status and family background.

A Comparative Study of Adjustment Level of Government and Private School Students

Sample

Principals of two schools were approached and made them understand about the test. 100 students were taken for the test and out of 100, 60 were listed out for the test who were willing.

Tool

Singh & Sinha (2005) Adjustment inventory for school students (AISS) was used to measure the adjustment level of Government & Private school students.

RESULTS

Table 1: Showing Mean, SD, and t values of Govt. and Private female students on different areas of adjustment level.

Area	Government		Private		t
	Mean	SD	Mean	SD	
Education	8.60	2.9472	6.60	2.89	1.87
Emotional	7.40	2.77	7.06	1.57	0.40
Social	7.86	3.09	6.66	2.38	1.19

Table 2: Showing Mean, SD, and t values of Govt. and Private male students on different areas of adjustment level

Area	Government		Private		t
	Mean	SD	Mean	SD	
Education	6.66	3.95	7.60	3.71	0.66
Emotional	7.80	2.67	8.13	3.22	0.30
Social	7.06	3.01	7.40	3.20	0.29

INTERPRETATION & DISCUSSION

Table indicates mean and SD value for female students of government and private school, mean 8.60 and SD 2.9472 female government students whereas mean of 6.60 and SD 2.89 is represented by female private school students. Table also indicates 't' value 1.87 ($p > .05$) which is non-significant which shows on education area of adjustment both the groups having more or less similar kind of adjustment level.

Mean 7.40 and SD 2.77 female government Student where as mean 7.06 and SD 1.57 is represented by female private school students. Table also indicates 't' value .40 ($p > .05$) which is not significant which shows on emotional area of adjustment both the groups have in more or less similar kind of adjustment level.

Mean 7.86 and SD 3.09 female government students where as mean 6.66 and SD 2.38 is represented by female private school students. Table also indicate 't' value 1.19 ($p > .05$) which is

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non-significant which shows on social area of adjustment both the groups having more or less similar kind of adjustment level.

Table indicates Mean and SD value for male students of government and private school. Mean 6.66 and SD 3.95 male government students where as mean of 7.60 and SD 3.71 is represented by male private school students. Table also indicates 't' value 0.66 ($p>.05$) which is non-significant which shows on educational area of adjustment both the groups having more or less similar kind of adjustment level.

Mean 7.80 and SD 2.67 male government students where as mean of 8.13 and SD 3.22 is represented by male private school students. Table also indicates 't' value 0.30 ($p>.05$) which is non-significant which shows on emotional area of adjustment both the groups having more or less similar kind of adjustment level. Mean 7.06 and SD 3.01 male government students where as mean of 7.40 and SD 3.01 is represented by male private school students. Table also indicates 't' value 0.29 ($p>.05$) which is non-significant which shows on social area of adjustment both the groups having more or less similar kind of adjustment level. The above analysis of responses given by school students is in the line of Makwana 2013 who also reported that adjustment of the school students among urban and rural area Ahmedabad district and result shown that there is no significant difference. In another study investigated by Paramanik, Saha & Mondal (2014) to also reported adjustment of secondary school students with respect to gender and residents and study revealed that there is no significant difference between adjustments of students residing at urban or rural areas.

CONCLUSION

It is concluded that there is no role of school environment as well as setup in the adjustment process of school going students. It indicates that both groups manage the problem in similar ways as well. Though the private school students may have higher control but that has no role as far as the adjustment level of those students is concerned.

Acknowledgments

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Hussain. A, kumar A,(2008) Academic Stress and Adjustment Among High School Students, *Journal Of The Indian Academy Of Applied Psychology*, 7978-7981.
- Makwana M, (2014). Adjustment Of The Secondary School Students Among Urban And Rural Areas In Ahemdabad District, *Journal Of Contemporary Psychological Research*, 340-345.

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- Makwana MD, Kaji SM (2014). Adjustment Of Secondary School Students In Relation To Their Gender, *The International Journal of Indian Psychology*, 73-79.
- Paramanik. J, Saha B., Mondal BC,(2014) Adjustment Of Secondary School Students With Respect To Gender And Residence, *American Journal Of Educational Research*, 1137-1147.
- Yellaiih,(2012) A Study Of adjustment On Academic Achievement Of High School Students, *International Journal Of Social Sciences And Interdisciplinary Research*, 400-430.

Level of Job Satisfaction and Self Esteem among Doctors of Private and Government Hospitals

Varsha Kanojia^{1*}

ABSTRACT

The efficiency and accountability of any organization mostly depends on the correct application of force and efforts of its personnel. If the force of motivation and satisfaction is high, the ability and professional aptitude in the organization will work effectively. The purpose of present study is to measure and compare job satisfaction and self esteem among doctors of private and government hospitals. The sample of this study includes 80 doctors, 40 from government and 40 from private hospitals. Structured questionnaires were used to collect primary data for the study. Findings of the study revealed that doctors of private hospitals have greater job satisfaction than the doctors of government hospitals. Findings might be interpreted in terms of specialist doctors' move in private hospitals due to availability of modern equipments, good working conditions, recognition and challenging work and chances of advancement.

Keywords: *Self esteem, Job Satisfaction, Public and Private sector*

The efficiency and accountability of any organization mostly depends on the correct application of force and efforts of its personnel. If the force of motivation and satisfaction is high, the ability and professional aptitude in the organization will work effectively. Health and performance are interdependent to each other. Good health is the foundation of healthy routine and performance. A healthy person will do better in every aspect of life, such as professional, family marital as well as social life. Motivation towards service in Government sector has increasingly been accepted as a central construct in public personnel management and public HRM research. In recent years, research on public service motivation has grown substantially (Perry and Hondeghem, 2008) and has now reached a point where it finally lives up to its status of being 'one of the big questions of public management' (Behn 1995).

REVIEW OF RELATED LITERATURE

Jayasuriya et al (2012) researched on rural health workers and their work environment: The results of this study showed that there was significant difference in the level of job satisfaction

¹ Research Scholar, Department of Psychology, J. N. Vyas University, Jodhpur, India

*Responding Author

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by age and years in the profession. Higher levels of overall job satisfaction and intrinsic satisfaction were seen in nurses employed by Church facilities compared to government facilities. Ownership of facility, work climate, supervisory support and community support predicted variation in job satisfaction. The factors contributing most were work climate and supervisory support.

Kaplan et al (2012) investigated relationship between job satisfaction and organizational commitment: the case of hospital employees. The results of this study revealed that job satisfaction was positively and significantly correlated with affective commitment. In addition, job satisfaction was positively related to normative commitment and it was found that job satisfaction had no effect on continuance commitment.

Harouna (2011) conducted a study in capital city of Niger among 203 public sector employees. The employees were found to be satisfied with colleagues, supervisors and nature of work itself. But they felt that management could provide them with higher salary and better opportunities for promotion. Except marital status, all other demographic variables were found to be strongly related with job satisfaction.

Kumar et al. (2013) reported that low level of overall satisfaction among workers in public sector health care organization considering the factors responsible for this state of affairs, urgent and concrete strategies must be develop to address the concerns of public health professionals as they represent the highly sensitive domain of health system.

METHODOLOGY

Statement of the Problem:

The present investigation attempts to measure “*Level of Job Satisfaction and Self Esteem among Doctors of Private and Government Hospitals*”

Significance of the Problem:

Though there is a general perception that currently doctors are adequately satisfied with their jobs, yet formal medical research over the subject is meager all over the world. The same phenomena holds true for India where excessive psycho-socio stressors have made doctors more prone to deteriorated job satisfaction and self esteem. In last two decades, a lot of research has been done to evaluate job satisfaction in medical staff. Doctors' individual motivations for acting in a certain way are taken into consideration only when they can be conceptualized primarily in an economic sense. Attention has so far been paid to the influence that a change in working conditions and the professional self image of doctors has on healthcare provision for patients and on how attractive the job of a doctor is perceived to be. The results of present study will provide good opportunity for hospital management and its similar institutes to understand influence of motivation related factors on job satisfaction and self esteem to take necessary steps to eliminate the factors which affect job satisfaction and to strengthen motivation and self esteem related factors.

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Operational Definitions:

- **Self Esteem:** Self-esteem reflects a person's overall subjective emotional evaluation of his or her own worth. It is a judgment of oneself as well as an attitude toward the self. Self-esteem encompasses beliefs about oneself. It is the positive or negative evaluations of the self, as in how we feel about it.
- **Job Satisfaction:** Job Satisfaction is simply how content an individual is with his or her job, in other words, whether or not they like the job or individual aspects or facets of jobs, such as nature of work or supervision. It is multidimensional psychological responses to one's job are involved. It is a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences.

Objectives:

1. To examine and evaluate the level of job satisfaction among doctors of private and government hospitals.
2. To assess the self esteem among doctors of private and government hospitals.
3. Make recommendations for the focus and development of future research among young medical professionals with reference to job commitment, job satisfaction and self esteem.

Hypotheses:

1. There will be no significant mean difference among doctors of private and government hospitals with reference to dimensions of job satisfaction.
2. There will be no significant mean difference among doctors of private and government hospitals with reference to dimensions of self esteem.

Research Design:

The present study is not possible experimentally because of nature of investigation. The researcher adopted the quantitative descriptive research for gaining the objectives of the study. It is the survey quantitative research in which the event has already occurred and the effects of the variables were studied by qualitative analysis.

Variables:

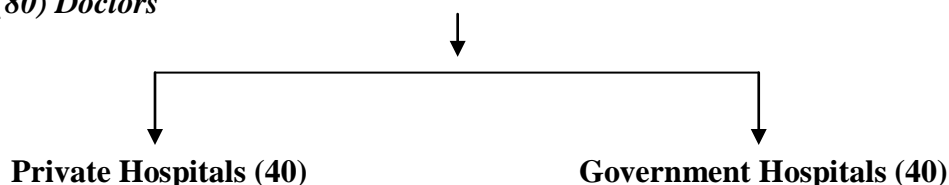
For the present research work, two categories of doctors regarding their place of appointment i.e. private and government hospitals were selected, whereas job-satisfaction and self esteem of male and female doctors are dependent variables.

Sample:

In the present investigation, researcher has selected a sample of 80 doctors, randomly consisting of both males and females from Jodhpur district. Total sample was divided into two groups i.e. doctors of private hospitals (40) and government hospitals (40).

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Total Sample (80) Doctors



Tools:

1. Job Satisfaction Scale: The present scale was developed by Singh, A. and Sharma, T.R. (2012). The level of job satisfaction was measured in two types of areas-job intrinsic (factors lying in the job itself) and job-extrinsic (factors lying outside job). Job-intrinsic area was further conceptualized as job concrete (say: excursions, working condition etc.) and job-abstract (say: cooperating, democratic functioning etc.); and job-extrinsic area as consisting of three components viz. psycho-social aspects, financial aspects and community/nation growth aspect. There are 30 statements. Each statement has five alternatives from which a respondent has to choose any one which candidly expresses his responsive view. The positive statements carry a weightage of 4, 3, 2, 1 and 0 and the negative ones a weightage of 0, 1, 2, 3 and 4. The total score gives a quick measure of satisfaction/dissatisfaction of a worker towards his job. The minimum and maximum range of score is 00 (zero) to 120.

2. Self Esteem Inventory: This inventory was developed by Prasad, M.S. and Thakur, G.P. (1977). The inventory consists of 30 items. These 30 items further divided into desirable 17 and 13 undesirable. Desirable items will score 7 if answered completely true and 1 if answered completely false. The socially undesirable item would be scored in opposite manner i.e. the completely false point would get 7 score and completely true would get 1 score.

Data Collection Procedure:

To conduct present study, the investigator used 'survey method' of research. Descriptive research studies were designed to obtain pertinent and precise information concerning the current status of any phenomena (*Garrett, 2006*).

The investigator with great interest planned the data collection soon after selecting sample and finalizing the research. Doctors of Private and Government Hospitals were approached. Some of them asked researcher about aims and objectives of this investigation. After fulfilling some official formalities and conditions, arrangements to meet the doctors were made. The researcher explained the importance of research work and collected the data after ensuring to maintain their confidentiality. The group was divided equally in male and female doctors. Each subject was given a questionnaire one after another in same sequence. All the subjects were requested to read statements one after the other and give their responses in response column by choosing appropriate response for each statement, whichever they felt correct and appropriate. The expectations of the questionnaire from the subjects were explained in detail. The investigator

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clarified and explained the doubts, if they had any. The respondents were requested not to leave any item unanswered and incomplete.

Scoring:

In the present study, scoring of the obtained data was done with help of respective manuals available for the test. The data have been arranged in the respective tables according to the statistical test applied.

Statistical Analysis:

In this study to find out the significant difference between groups of doctors student 't' test, Mean and SD were calculated.

RESULT AND DISCUSSION

Table 1:- Showing Mean, Standard Deviation & 't' values between doctors of private and government hospitals on dimensions of job satisfaction.

Factors	Group	N	Mean	SD	't'	Sig. Level
Job Concrete	Private	40	26.82	5.10	4.14	$p < .01$
	Govt.	40	22.62	3.87		
Job Abstract	Private	40	24.47	2.83	4.52	$p < .01$
	Govt.	40	21.40	3.23		
Psycho-Social	Private	40	26.10	4.61	5.49	$p < .01$
	Govt.	40	20.62	4.28		
Economic	Private	40	18.82	6.38	4.10	$p < .01$
	Govt.	40	14.10	3.50		
Community Growth	Private	40	17.27	2.68	1.49	NS
	Govt.	40	16.25	3.41		
Overall Satisfaction	Private	40	113.50	11.13	7.92	$p < .01$
	Govt.	40	95.00	9.71		

When independent sample 't' test was applied to check the impact of place of appointment i.e. private sector or government sector on Job Satisfaction Dimension 1 (Job concrete) among doctors of private and government hospitals then significant 't' value was found. The 't' value is reported 't' = 4.14, $p < .01$ (Table no.1.1). It reveals that mean scores of doctors working in private and government hospitals are 26.82 (SD = 5.10) and 22.62 (SD = 3.87) respectively. On the basis of significant mean difference it can be said that doctors working in private hospitals are more satisfied on Job concrete. They are more satisfied in terms of place of posting and working conditions as compared to doctors working in government hospitals.

Results reveal that place of appointment had significant impact on job satisfaction. Table no. 1.2 indicated 't' ratio and mean values for Job abstract. In which mean for doctors of private hospitals is 24.47 (SD = 2.83) and for doctors working in government hospital is 21.40 (SD =

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3.23). Whereas, value for 't' ratio is significant (39.98, $p < .01$). Doctors of private hospitals have high Job Satisfaction Dimension 2 (Job abstract), whereas doctors of government hospitals have average Job Satisfaction. Doctors working in private hospitals have greater characteristics in terms of Job Satisfaction such as emphasizing useful and practical values, concerned with the business world or other practical affairs. Therefore, it can be said that job satisfaction is specially the matter of better job conditions irrespective of qualification and designation that are generally related to satisfaction levels.

A perusal of Table no. 1.3 shows that 't' ratio and mean value for Job Satisfaction dimension 3 was found significant 't' = 5.49, $p < .01$; Doctor of private hospital scored higher mean ($M = 26.10$, $SD = 4.61$) as compared to doctors from government hospital ($M = 20.62$, $SD = 4.28$). Thus, it can be interpreted that doctors working in private hospitals have greater psycho-social Job satisfaction than doctors working in government hospitals.

Table no. 1.4 reported that mean score of doctors working in private hospitals are higher ($M=18.82$, $SD=6.38$) than the doctors working in government hospitals ($M=14.10$, $SD=3.50$) on job satisfaction dimension economic. Significant 't' value is to be found 't' = 4.10, ($p < .01$). Findings suggested that doctors working in private hospitals are more satisfied in terms of salary, allowances and overall financial security.

In the same way table 1.5 highlighted insignificant mean differences among doctors working in private and government hospitals. Mean scores of both the group i.e. private and government doctors are $M=17.27$, $SD=2.68$ and $M=16.25$, $SD=3.41$ respectively. Mean difference is also to be found insignificant 't' = 1.49, ($p > .05$). On the basis of insignificant mean difference one can well imagine that both the groups of doctors have more or less similar perception towards community growth traits like quality of life, national economy etc.

Table 1.6 reported overall job satisfaction among the doctors. Doctors working in private hospitals have scored higher mean ($M=113.50$, $SD=11.13$) as compared to doctors working in government hospitals ($M=95.00$, $SD=9.71$). Further, significant mean difference ($t=7.92$, $p < .01$) was observed for overall dimensions of job satisfaction. Findings highlighted that doctors working in private hospitals have greater traits of job satisfaction so far job concrete, job abstracts, psycho-social and economic dimensions in comparison to doctors working in government hospitals. Hence, H_01 is strongly rejected and partially accepted. It is rejected with reference to job satisfaction dimension job concrete, job abstract, psycho-social and economic whereas the hypothesis is maintained for job satisfaction dimension community growth. Hence, low level of overall job satisfaction among doctors in government sector was reported. Considering the factors responsible for this state of affairs, urgent and concrete strategies must be developed to address the concerns of public health professionals as they represent a highly responsive domain of health system of India.

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Table 2:- Showing Mean, Standard Deviation & 't' values between doctors of private and government hospitals on dimensions of self esteem.

Factors	Group	N	Mean	SD	't'	Sig Level
Socially Desirable	Private	40	100.07	10.14	0.69	NS
	Government	40	101.52	8.45		
Socially Undesirable	Private	40	67.20	11.07	8.01	$p<.01$
	Government	40	43.00	15.57		

It is evident from Table 2.1 that significant difference is to be not found between doctors of private and government hospitals on self esteem dimension socially desirable ('t' = 0.69, $p>.05$). Mean score of doctors working in private hospital and doctors working in government hospitals are 100.07 (SD=10.14) and 101.52 (SD=8.45) respectively. On the basis of this insignificant difference one can say conclusively that place of appointment has no effect on self esteem of doctors; both the groups of doctors have by and large similar level of self esteem. All the doctors have similar level of positive self.

Furthermore, results summarized in Table 2.2 that mean values for self esteem dimension socially undesirable behaviour is to be found for doctors of private hospitals is $M=67.20$ (SD=11.07) and for doctors working in government hospitals is $M=43.00$ (SD=15.57) respectively, this shows there is a significant difference and the 't' value is 8.01($p<.01$). It shows that H_0 is partly rejected or partly accepted. It is repudiated with socially undesirable wherein it is sustained on socially desirable domain of self esteem. Thus, it can be concluded that government doctors have more negative self than the doctors of private hospitals. Finding might be interpreted in terms of lack of Short courses on stress management, advices by trained psychotherapists and encouragement to seek immediate remedy can curb the early symptoms of stress and anxiety.

CONCLUSION

The study was carried out among 80 respondents who voluntarily filled up the questionnaire related to job satisfaction and self esteem. Contrary to common perception of medical profession being a noble profession where dedication and social service should be the motivation for their occupation. It is viewed as a job satisfaction is dependent upon various factors just like in other professions. Less job satisfaction among junior doctors and doctors in teaching profession needs to be taken note of and attempts should be made to address the significant aspects to improve job satisfaction among all doctors. The smooth functioning of a health care organization is significantly dependent on the performance of medical professionals. Highly motivated professionals perform their jobs well and motivation to do so comes from their perception of the job being satisfactory. The study reveals that job satisfaction of private hospital doctors is more than government hospital doctors as a result, specialist doctors move in private hospitals due to

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availability of modern equipments, good working conditions, recognition and challenging work and chances of advancement.

Acknowledgments

The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Behn, Robert D. (1995). The big question of public management. *Public administration review*, 55 (4):313:324.
- Garrett, H.E. (2006). *Statistics in psychology and education*. Paragon International Publisher, New Delhi.
- Harouna (2011), Employee Job Satisfaction in Public Sector: A Study Based on the Case of Niger, 7th International Conference on Innovation & Management.
- Kumar, R., Ahmed, J., Shaikh, B.T., Hafeez, R. and Hafiz, A. (2013). Job satisfaction among public health professionals working in public sector: A cross sectional study from Pakistan. *Human Resources for Health*. Published online 2013 Jan 9. doi: 10.1186/1478-4491-11-2.
- M.S. Prasad and G.P. Thakur (1977). *Manual of Self Esteem Inventory*. Psychological Corporation, Agra.
- Metin Kaplan et al (2012), The Relationship between Job Satisfaction and Organizational Commitment: The Case of Hospital Employees, *World Journal of Management*, 4(1), 22-29.
- Perry, J. L. and Hondeghem, A. (2008). Building theory and empirical evidence about public service motivation. *International public management journal*. 11(1): 3-12.
- Rohan Jayasuriya et al (2012), Rural health workers and their work environment: the role of inter-personal factors on job satisfaction of nurses in rural Papua New Guinea, *BMC Health Services Research*.
- Singh, A., & Sharma, T.R. (2012) *Job Satisfaction Scale*, National Psychological Corporation, Agra (INDIA).

Effectiveness of Remedial Teaching on Thinking Strategies of Slow Learners

Neelu Jangid^{1*}, Umed Singh Inda²

ABSTRACT

Remedial teaching methods are innovative teaching strategy designed to improve the storage and retrieval of information from long-term memory. The present study was conducted to explore the effectiveness of Remedial teaching on thinking strategies of Slow Learners. For the present research work investigators have selected sample of 22 children who have identified and screened as slow learner. Purposive sampling technique was used. The total sample was divided into experimental (12) and control (10) group purposively. Dimensions of thinking strategies were measured by Swarup-Mehta Diagnostic Test of Learning Disability (2008). Findings of present research revealed that experimental group has revealed remarkable changes in their cognitive and thinking abilities after the getting three-month Remedial teaching. Remedial teachings substantially enhance higher levels of retention in the immediate and delayed recall of language vocabulary and concepts in comparison with general teaching methods.

Keywords: *Thinking strategy, Cognitive functioning, Remedial Teaching*

A learning disability is a neurological disorder. In simple terms, a learning disability results from a difference in the way a person's brain is "wired." Children with learning disabilities are as keen as or quicker witted than their companions. However, they may experience issues perusing, composing, spelling, and thinking, reviewing and additionally sorting out information if left to make sense of things by them or if taught in conventional ways. Memory has a key effect on eventual vocabulary and grammar achievement. There are two types of fundamental memory: short-term memory and long-term memory. Short term memory keeps the information which is being processed (a new word which is encountered for the first time). It is fast but it can hold information for a very short time due to its small storage capacity. Long-term memory, on the other hand, has an unlimited storage capacity but is relatively slow. The aim of vocabulary learning and teaching is to transfer the lexical information from the short term memory to the long term memory (Schmitt, 2000). Accordingly, the general picture of the mental lexicon is one

¹ Special Educator, Vallabh Vidyanagar, Anand, Gujarat, India

² Department of Psychology, J. N. Vyas University, Jodhpur, Raj., India

*Responding Author

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in which there a variety of links between words, some strong, some weak. The main way, to transfer the vocabulary items from short-term to long-term memory and create a strong connection there is by finding some elements in the mental lexicon to attach the new lexical item to (Schmitt, 2000).

Remedial education is education which is designed to bring students who are lagging behind up to the level of achievement realized by their peers. Remedial Teaching means that help is offered to students who need pedagogical or didactic assistance. These are often children who function at a lower than average level because of a certain learning- or behavioral problem/disorder. However, remedial teaching can also be offered to pupils who accomplish at a higher than average level, they also can do with the extra attention and care.

There are a unit variety of reasons why a student would possibly would like remedial education. Some students attend schools of poor quality and do not receive adequate grounding in mathematics and language to organize them for school or life. Other students might have transferred in and out faculties' of colleges or missed school plenty, making gaps in their education that contribute to the lack of information in core subjects. Students can also have learning disorders and other problems that have impaired their ability to find out. In remedial education, people are usually given assessments to determine their level of competency. Based on test results, the pupils are placed in classes which are most likely to provide benefits. Classes are often little, with a spotlight on high teacher-student interaction, and that they will occur at the hours of darkness or throughout the day to accommodate various needs. Within the course of the category, the teacher can bring students up to hurry in order that they need skills comparable to those of their peers.

Silva and Capellini (2010) showed that the Phonological and Reading Remediation Program was effective. The use of the Program improved perception, production and manipulation of sounds and syllables, interfering directly on the reading skills and comprehension of students with learning disabilities.

Selvarajan and Vasanthagumar (2012) identified the low achievers as one of its issues and wants to test the effectiveness of remedial teaching in its context. This study was designed to identify the reasons for low achievement and the effectiveness of the remedial teaching program. The findings show that the socio economic condition of the family and physical and psycho social status of the student cause low achievement. The implemented remedial program proved to be effective by recovering ninety four percentage of students in Tamil language and ninety three percentage of students in Mathematics.

Effectiveness of Remedial Teaching on Thinking Strategies of Slow Learners

Statement of problem:

The present investigation attempts to “*Effectiveness of Remedial Teaching on the Thinking Strategies of Slow Learners*”

Objectives:

1. To examine and evaluate the effectiveness of Remedial Teaching on thinking patterns of slow learners.
2. To examine and evaluate Remedial Teaching for slow learners.
3. Make recommendations for the focus and development of future research in this area.

Conceptual Clarifications:

Slow learners: A “slow learner” is not a diagnostic category, it is a term people use to describe a student who has the ability to learn necessary academic skills, but at rate and depth below average same age peers.

Thinking Strategies: Thinking styles of children at earlier level towards, cognitive processing viz. Memory, Concept development, Reasoning and Problem-Solving skills.

Remedial Teaching: education is also known as developmental education, basic skills education, compensatory education, preparatory education, and academic upgrading. It is signed to assist students in order to achieve expected competencies in core academic skills such as literacy and numeracy.

Hypothesis:

1. Remedial teaching will help to improve the thinking strategies of Slow Learners.
2. There will be no significant difference between mean scores of pre & post sessions of the control group on the Thinking Strategies of Slow Learners.

METHODOLOGY

Research Design:

Present research is a Quasi-experimental design in which pre and post design were used, further divided into experimental and control group purposively. In the experimental group abilities of slow learners were assessed regarding thinking patterns prior to application of Remedial Teaching. The same abilities of these pupils were measured after the application of Remedial Teaching, whereas in the control group the same abilities of the pupils were measured without initiation of Remedial Teaching. The difference between these two sessions revealed the effect of Remedial Teaching. This is a field experimental study; the slow learners are tested in general as well as inclusive schools. In this investigation, the independent variable is the application of Remedial Teaching methods. Dependent variables are the thinking patterns of slow learners. The design is as follows:-

Effectiveness of Remedial Teaching on Thinking Strategies of Slow Learners

Experimental Group

BEFORE	Exposure of Remedial Teaching	AFTER
Ability regarding thinking patterns	Duration – 3 months	Ability regarding thinking patterns

Control group

BEFORE	Application of Regular Teaching Methods	AFTER
Ability regarding thinking patterns	Duration – 3 months	Ability regarding thinking patterns

Sample:

For the present research work investigators have selected Sample of 22 children with the help of purposive sampling technique who are diagnosed as slow learners. The total sample was divided into experimental (12) and control group (10) purposively. The samples were selected from different institutes and NGOs Gujarat state. These children were diagnosed on the following basis.

- Screening
- Parental interview
- Teachers interview

No child is going to be chosen if he/she has any other associative disorder. Details of sample

Experimental Group	Control Group	Total
12	10	22

Tool:

Thinking Strategy – is measured by Swarup-Mehta Test of Thinking Strategies (2011). The detail of sub-tests are as follows –

1. Memory:
2. Concept Development:
3. Reasoning:
4. Problem Solving:

Procedure:

The study took place over a period of three months. The investigator had worked with thirty students (age group 9 to 12 years) who were placed into two groups. The first group was an experimental group in which a meeting with the teachers occurred before intervention days to review the training procedure. During the meeting suggestions regarding the procedures were incorporated. The three teachers were provided a formal training of two week about remedial teaching. The instructional material and work sheets were developed by the investigators according to their regular classroom curriculum with the help of their teachers. Before giving

Effectiveness of Remedial Teaching on Thinking Strategies of Slow Learners

intervention to both the groups, entry level assessment was carried out to evaluate their thinking pattern. Two hour remedial teaching was given to the students per day by the trained teachers. During the intervention period, follow-up process was also done by the investigators regarding proper procedure of intervention in the experimental group.

In the second group, which was the control group, intervention of remedial teaching was not produced. Regular classroom teaching methods were used for instructions. The curriculum content was same as the experimental group. After the completion of the three-month intervention period, participants in both the control as well as the experimental group were administered assessment through the tools used for the pre-assessment process.

Scoring:

In the present study, scoring of the obtained data was done with help of respective manuals available for the test. The data have been arranged in the respective tables according to the statistical test applied.

Statistical Analysis:

In the present study to find out the significant mean difference between Pre and post assessment of slow learners. Mean, SD and Paired sample 't' tests were also calculated.

RESULTS & DISCUSSION

Table:- 1 Showing Mean, SD & 't' values between pre-test and post-test scores of the Experimental group for various areas of Thinking Strategy.

Areas	Groups	Mean	N	SD	"t"	Significance level
Memory	Pre-test	13.0000	12	3.13340	3.91	P<.01
	Post-test	17.7500	12	4.18058		
Development	Pre-test	10.5000	12	3.06001	3.28	P<.01
	Post-test	16.5833	12	6.65321		
Reasoning	Pre-test	12.9167	12	3.11764	4.47	P<.01
	Post-test	21.0833	12	6.66686		
Problem Solving	Pre-test	17.0833	12	3.08835	3.61	P<.01
	Post-test	23.8333	12	6.07279		

It is evident from table 1.1 that scores of both the session i.e. pre and post test have a significant difference on thinking strategy area Memory. Calculated 't' value is to be found significant ('t'=3.91, $p<.01$). The mean score of pre-test and post-test are 13.00 (SD=3.13) and 17.75 (SD=4.18) respectively. On the basis of a significant mean difference, it can be said that Remedial Teaching has a significant impact on the enhancement of memory of slow learners. It means children with slow learning become more capable of encoding and decoding process after the application of Remedial instructions. They used to integrate the newly acquired information

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into earlier existing information through associations, rehearsals, coding and chunking because researchers have shown that slow learner pupils have a problem with regard to information gathering, processing and organizing.

It may be inferred from Table 1.2 that significant difference is to be found between pre and post test scores of slow learners on concept development in the experimental group. The mean score of pretest and post test are 10.50 (SD=3.06) and 16.58 (SD=6.65) respectively. 't' ratio is reported significant ('t'= 3.28, $p < .01$). On the basis of this significant difference conclusively one can say that remedial instructions play a significant role in concept development of slow learners. It confirms the strengths and weakness of abstractions, categorization and generalization. These process, through distinct from each other call for their integration, when a concept is to be attained, the performance of children can reveal whether the child is under generalized or over generalized.

An analysis of table 1.3 highlights that the two sessions are under studies i.e. scores of pre and post test sessions differ significantly on reasoning. 't' value and mean scores for thinking strategy area reasoning in which mean difference is to be found significant ('t'=4.47, $p < .01$). Slow learners have scored higher (M=21.08, SD=6.66) in post-test than pre-test (M=12.91, SD=3.11). On the basis of a significant mean difference, it may be said that Remedial teaching methods are an effective strategy for increasing student comprehension and reasoning skills. Thinking patterns of pupils have deductive or inductive logics and restructure content or acquire desirable perception and cognitions. They search out relevant information, see it in relation to early acquired information, thereby returning to some conclusions, make predictions or solve a problem.

When 't' test was applied to check the impact of remedial teaching on problem-solving skills of slow learners, mean score of pre-test and post-test are differed significantly with each other on thinking strategy area problem solving. The calculated paired sample 't' value is significant ('t'=3.61, $p < .01$). The mean value obtained in pre-test and post test for problem solving are M=17.08 (SD=3.08) and M= 23.83 (SD=6.07) respectively. It can be concluded that remedial teaching has greater potential in the development of problem-solving skills of slow learners. They have more skills of overcoming difficulties that appear to interfere with the attainment of the goal. They recognize their ideas or restructure their experiences in order to overcome obstacles and attain goals.

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Table:- 2 Showing Mean, SD & 't' values between pre-test and post-test scores of Control group for various areas of Thinking Strategy.

Areas	Groups	Mean	N	SD	"t"	Significance level
Memory	Pre-test	12.91	10	3.97	1.12	NS
	Post-test	13.62	10	3.27		
Concept Development	Pre-test	10.53	10	3.55	1.75	NS
	Post-test	11.94	10	3.01		
Reasoning	Pre-test	13.41	10	3.27	1.51	NS
	Post-test	14.12	10	2.68		
Problem Solving	Pre-test	16.52	10	4.28	0.94	NS
	Post-test	17.65	10	3.16		

The findings can very well be analyzed from Table 2.1 to 2.4 that insignificant mean differences are to be reported in control group for thinking strategy dimensions like memory, concept development, reasoning and problem solving of slow learners. For the thinking strategy area memory mean scores of pretest and posttests are $M=12.91$ ($SD=3.97$) and $M=13.62$ ($SD=3.27$) respectively. 't' value is also to be found insignificant. ($t=1.12, p>.05$). By the same point of view table also indicate that mean value obtained by control group on thinking strategy area concept development in pre and post tests are $M=10.53$ ($SD=3.55$) and $M=11.94$ ($SD=3.01$). The difference between both the mean scores is to be found insignificant ($t=1.75, p>.05$). Similarly, in both pre and post sessions, control group have obtained a mean score for thinking strategy area reasoning are $M=13.41$ ($SD=3.27$) and $M=14.12$ ($SD=2.68$) respectively. Insignificant ('t') value is obtained ($t=1.51, p>.05$)

As again mean score of pre and post test for control group on thinking strategy area problem solving are $M=16.52$ ($SD=4.28$) and $M=17.65$ ($SD=3.16$) respectively. On the basis of above insignificant Mean differences, one can say that regular classroom teaching instructions are less effective in comparison of remedial teaching. Thus, both the hypotheses are maintained.

CONCLUSION

The study indicated that how the students of experimental group had significant improvement in the test scores as evaluated by their post-test evaluation. These twenty-two students had been selected because of their inactive and poor academic skills when it came to their facts about concept development, reasoning, and problem-solving skill. Characteristics of slow learners such as integration of newly acquired information into the earlier existing information through association, encoding and decoding process of information, rehearsal, coding and chunking, generalization abilities, abilities of diagnose the problem, development of inductive and deductive logical thinking, making predications to solve problems, process of overcoming

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difficulties, instant respond in typical situations and seeking freedom from tension created by obstructions in a way of want-satisfaction are found less in those slow learners who are getting normal teaching instructions in comparison to the children who are getting remedial teaching. Remedial teaching can help struggling learners shore up their fundamental skills. This extra support can help them catch up to their peers. And sometimes, it eliminates the need for referral to special education.

RECOMMENDATIONS

The study further recommended organizing seminars and workshops to create awareness in general public, parents, teachers and students regarding usefulness of remedial teaching methods. It was also recommended that there was a great requirement of researches to be carried out in field of learning disability.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Aitchison, J. (2002). Words in the Mind: An Introduction to the Mental Lexicon (3rd Ed.). Blackwell Publishers: Great Britain.
- Pressley, M., & Schneider, W. (1997). Memory development between two and twenty. Mahwah, NJ.: Lawrence Erlbaum Associates.
- Schmitt, N. (2000). Vocabulary in Language Teaching. Cambridge: Cambridge University Press.
- Selvarajan, P. and Vasanthagumar, T (2012) The Impact of Remedial Teaching on Improving the Competencies of Low Achievers, International Journal of Social Science & Interdisciplinary Research Vol.1 Issue 9, ISSN 2277 3630
- Silva, C. D., Capellini, S. A. (2010) Efficacy of the reading and phonological remediation program in learning disabilities, Pro Fono. 2010 Apr-Jun;22(2):131-9.
- Swarup, S., and Mehta, D.H.(2011). Manual of Diagnostic Test of Learning Disability. Published by Prasad Psycho Corporation, New Delhi.
- Yates, F. A. (1972). The art of memory. Chicago: The University of Chicago Press.

Conversion of Field Data in Lab Experiments'

Dr. Usha Chelani^{1*}, Geetika Goyal²

ABSTRACT

The objective of the present investigation is to examine the visual search method while controlling the factors like reaction time, intelligence, span of attention and experience and to discuss the differences between lab and field experiment and converting field based research to lab based research. It was hypothesized that suitable methodology will overcome the difficulty in transforming the visual search data among lab and field experiments. At first, 25 subjects were randomly selected and assessed on Psychological tests like Progressive Raven Matrix, Attention span and Ishihara colour test. Keeping the controlled situation in view, 15 students were ultimately selected for the experiments. Results revealed that Absolute Threshold of board recognition in lab is at 583.33 ft. whereas in field study it is at 612.5 ft., absolute threshold for green and brown colours is at 475 ft. for both lab and field situations. It disclosed inequitable support of current theory.

Keywords: *Visual Search, Intelligence, Experience, Attention, Field & Lab experiment.*

Visual search is the method of finding comprehensive target items within a surroundings based on particular visual features or semantic information (Dodd s and Flowers 2012). Identifying a green colour in the red shade engages many attentional and perceptual features. Identifying objects in both field and lab need cognitive factors which involve memory, attention and perception. Role of cognition is broadly considered in lab visual experiments. Studies on attention span and visual short term memory are reported by Yatis and Gonides 1996. In ancient times, psychological investigation has been carried out to know cognitive method for performing visual search task and the mechanism that consent for successful recognition of the target. Current technological advancement is also used for the development of screening method.

Controlling the other entire thing apart from experience, it is known that the skilled subjects use dissimilar approach, their expertise on search performance. When the organization involving experienced and inexperienced subjects is done, it is stated that qualified subjects show improved accurateness with skill. Dodd and Flowers 2012 recommended that expertise primary study in

¹ Faculty, TEPSE & HEPSN Centre, J. N. Vyas University, Jodhpur, Raj., India

² Research Scholar, Department of Psychology, J. N. Vyas University, Jodhpur, Raj., India

*Responding Author

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visual search has shown cognitive mechanisms accountable for successful visual search as well as a diversity of issue that tend to hinder or progress performance. There are numerous difficulties in between the method of straight forward transformation as the control situations of the lab experiments are poles apart from the field search. For e.g. - shadow of the object, stimuli existing in the field, terrain and environment, experience and other characteristics of the subject. Certain lab and field study trials have been done collectively to calculate the factors that have impacted visual search. Other features like motivation, tension also affect the visual search performance. Some current work has examined the effects of motivated and uneasy surroundings on a variety of cognitive course (Murty *et al* 2011).

In the current research, an effort was made to link the gap among the result of the lab and field trial with the help of higher technological support. The aim of the current study is to examine the variation among lab and field experiment and how to overcome these problems to bridge the gap between lab and field conditions. Keeping in view the above observation, the factors like colour blindness, intelligence, eye sight, attention, reaction time, stress, experience were controlled. Impact of these variables will be determined how these factors will control the visual search presentation.

Objectives:

1. To study the visual search method while controlling the parameter like span of attention, intelligence, reaction time and experience.
2. To discuss the differences among lab and field experiment and translating field based investigate to lab based research.

Hypothesis:

The nature of stimuli will vary in lab as compared to field; the range is inadequate while in field unidentified and limited stimuli are perceived though, it was hypothesized that suitable methodology will overcome the difficulties in converting the visual search data between lab and field experiments.

METHODOLOGY

Tools:

Firstly 25 subjects were aimlessly selected and tested on Psychological tests like progressive ravens' matrix, reaction time, colour blindness and attention span.

Following tests were used in the current research –

Progressive Raven Matrix- This matrix is a famous intelligence test, a non-verbal multiple choice test which measures the conceptual reasoning in every item. It includes 60 questions. In each item, the subject was asked to identify the missing piece that completes a pattern. Many patterns were shown in the form of a 4x4, 3x3, or 2x2 matrixes, giving the trial its name. After examination of figures, subject between 100 -110 IQ were chosen (Raven 1996).

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Tachistoscope: To measure Span of Attention, Tachistoscope was used. On 10 cards 1-10 circles were drawn. For e.g.- on the card no. 1, 2 circle, card no. 2, 2 circles and on card 10th card, 10 circles were drawn. Random presentation through Tachistoscope for 1/6 sec is made of these cards. The subject was instructed to ponder on the card and recognize the nos. of circles on each card. In this way all the cards were randomly presented thrice. The obtained data was analyzed and subjects who belong to average range were chosen.

Ishihara colour test- This test has certain types of plates. Plates 1-17 each contain a number; plates 18-24 contain one or two wiggly lines. To clear each test, subject had to recognize the right number, or rightly trace the wiggly lines. Subject was given following directions, "Sit roughly 75 cm from your computer screen, with each circle set at eye level, preferably have mild normal light and no glare on your monitor. Inner illumination and glare can change the colour of the pictures, try to spot the hidden figure or line within 5 seconds then click on the picture (left mouse button), upon left clicking, the answer will be shown along with an scrutiny explaining your condition if you got it wrong, continue to the next Ishihara test, complete them all to help measure your colour blindness severity. You can toggle back and forth between the original plate and the answer by clicking on the plate itself." Eye-sight of each subject was also examined.

Procedure:

After the study, on the basis of outcome take from the psychological tests, 15 subjects were selected, 5 of them were exposed to both field and lab experiments (experienced group) and other 5 were only exposed to field and rest 5 only to lab trial. All the subjects were told that, "In this field an item is hidden, you have to identify the thing which is not ordinary one for this field. There will be some distances on which you will be asked to trace that item and illustrate it. You will be blind-folded with support. Papers for jotting down your responses will be made available." They were also approved to move 20 ft. towards the right and left from the initial point. 11 distances were taken i.e. 900ft, 800 ft, 700 ft, 600 ft, 550 ft, 500 ft, 450 ft, 400 ft, 350 ft, 300 ft, and 250 ft. respectively. In field, trial began at 8.00 AM and a board with different pattern was hidden in the bushes against the daylight to keep away from the light on eyes of subjects. At each distance, 3 minutes were given to place the item. Their outcomes were obtained on an answer-sheet. An additional answer- sheet including the sketch of patterns was given to the subjects as soon as they observed patterns on the board. Each subject was supported independently. After finishing the trial, videography was made which was shown to the subjects in lab under controlled surroundings. The similar directions were known to them as well and their answers were noted during lab trial. In current research while converting the field data into lab investigation, the distance for videography is calculated 1/3 of field study.

Sample:

Originally 25 PG students were engaged for screening on colour blindness test for eye sight test, IQ test, span of attention and reaction time. Keeping the controlled circumstances in mind, 15 students were ultimately chosen for the trial. 5 out of these 15 subjects were used for field trial

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and the same subjects were used in lab trial. An additional group of 5 students were taken for field experiment and left over 5 for lab trial.

Experienced Subjects i.e. same set of students used in both lab and field experiments (N=5)

Perceived response	Distance (in feet)	Field 'X'		Lab 'Y'	
Miscellaneous response	600	Board 2	Miscellaneous 3	Board 1	Miscellaneous 4
	550	Board 2		4	
	500	Board 5		4	
Patches with colours	450	colour green 3		colour green 4	
Correct identification of patches and colours	400	4		5	
Correct identification of patches and colours	350	5		5	
Correct identification of patches and colours	300	5		5	
Correct identification of patches and colours	250	5		5	
		31		33	

Experienced subjects both in lab and field experiments

In the present study, total 5 subjects were taken who were shown visual tasks in both lab and field. At 600 ft., in field 2 subjects were able to identify the board and 3 subjects gave various answers like bushes, trees, birds, polythene, box, men, etc. At the same distance 1 subject identified the board and 4 subjects gave various answers in lab. At 550 ft., 2 subjects recognized that board in field and 4 subjects in lab respectively. Similarly, at 500 ft., 5 and 4 subjects identified the board in field and lab respectively. At 450 ft., 3 subjects recognized green patches on the board and 4 subjects in field and lab respectively and similarly, at 400 ft., 4 and 5 subjects recognized the right green patches in field and lab respectively. From 350-250 ft., all the 5 subjects recognized the board along with the correct green and brown patches in both field and lab.

Inexperienced subjects i.e. different subjects used in both lab and field experiments (N=10)

Perceived response	Distance	Lab 'Y'	Field 'X'
No response	600	7	9
No response	550	8	10

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Perceived response	Distance	Lab 'Y'	Field 'X'
No response	500	9	10
Recognised green and brown colour	450	10	10
Recognised green and brown colour	400	10	10
Recognised green and brown colour	350	10	10
Recognised green and brown colour	300	10	10
Recognised green and brown colour	250	10	10
		74	79

Inexperienced subjects separately in lab and field experiments

In the present research, total 10 subjects (5 in field and 5 in lab experiments respectively) were engaged who were not exposed to such visual tasks. At 600 ft distance, 7 subjects perceived the board in lab and 9 subjects recognized in field respectively. Similarly, at 550 ft., 8 subjects could identify the board in lab and 10 subjects in field respectively. At 500 ft distance, 9 and 10 subjects recognized the board in lab and field respectively. From 450-250 ft., all the 10 subjects identified the board along with the colours green and brown colours and their shapes.

Absolute Threshold of board recognition in lab is at 583.33 ft. whereas in field study it is at 612.5 ft., absolute threshold for green and brown colours is at 475 ft. for both lab and field situations.

DISCUSSION

Findings are to discuss the differences between lab and field study particularly in most research task in lab involves searching for only one goal per test. And the goal take place comparatively recurrently but in field investigation it may comprise unknown and infinite number of stimuli and searching of aim is not easy whereas in lab, exposed area is restricted one and the subject is certain that target is within the flaunt. Apart from this, in the lab visual search has been used widely to learn about cognition. For example, search studies have up to date theories of basic perception (e.g., Wolfe et al. 2005), the organization of visual short-term memory (e.g., Alvarez and Cavanagh 2004), and attentional capture (e.g., Yantis and Jonides 1996; Franconeri et al.2005), to name just a few. Further than using visual search as a influential tool for understanding cognitive processing, researchers have also decided on search as an experimental paradigm with the aim of accepting how investigations are carried out. Over the years, psychological investigation has made incredible development in understanding the processes accountable for performing visual search tasks and the mechanisms that allow for the successful identification of goal items.

CONCLUSION

The threshold for identifying board, its shape and colour in field trial comes to 612.5 and for lab trial it is 583.33. The threshold depends on the amount of attention given to a stimulus could vary for two causes- one is dimension and the other is onlooker which pays more concentration to one or another aspect of total stimuli input. The development in detecting of the objective is usually accompanied by a declining false alarm. The changes can be described on the basis of habituation of the neural and physiological responses of the repetition events of the targets. If any apparent alteration in the criterion is shown by the decrease in the recognition and false alarm may be due to the change in expectancy with diverse signals rates. Modification in expectancy as the possibility that an event will be a signal can guide to a change in reaction. Thus, both the expectancy and habituation may change the observing response. At first blush, it would be easy to say that searches from the lab and the field are not compatible given the vast differences between the manner in which search research is typically in the lab and how search is performed in the field. However, such a conclusion would be both pragmatically unfortunate and empirically premature. Four significant hurdles in this process were explained by Clark et.al. (2011) are no. of targets, target prevalence, anxiety and experience, motivation, out of these four, except anxiety and motivation all the difficulties were controlled and in place of anxiety, stress level is controlled in current research.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Alvarez, G.A. & Cavanagh, P. (2004). The capacity of visual short-term memory is set both by visual information load and by number of objects, *Psychological science*, 15, 106-111.
- Clark, K., Cain, M.S. Adcock, R.A., & Mitroff, S.R. (2011). Interactions between reward, feedback, and timing structures on dual-target search performance, Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
- Franconeri, S.L., Hollingworth, A., & Simons, D.J. (2005). Do new objects capture attention? *Psychological science*, 16(4), 275-281.
- M.D. Dodd, J.H. Flowers (2012). The Influence of Attention, Learning, and Motivation on Visual Search, Nebraska symposium on motivation.
- Murty, V.P., LaBar, K.S., Hamilton, D.A, Adcock, R.A. (2011). Is all motivation good for learning: Dissociable influences of approach and avoidance motivation in declarative memory, *Learning and memory*, 18, 712-717.
- Raven, J. C. (1996). *Standard Progressive Matrices*, New Delhi, Manasayam Delhi Press.

Conversion of Field Data in Lab Experiments'

- Wolfe, J.M. Horowitz, T.S., & Kenner, N.M. (2005). Rare items often missed in visual searches. *Nature*, 435, 439-440.
- Yantis, S., & Jonides, J. (1996). Attentional capture by abrupt onsets: new perceptual objects or visual masking. *Journal of experimental psychology: human perception and performance*, 22(6), 1505-1513.

Effect Of Different Ragas, Classical Music and "Om" On Psycho-Social Problems of Old Aged Persons

Manisha Kaviya^{1*}, Dr. Chandra Kala Goswami²

ABSTRACT

The present investigation aims to study to test the effect of Indian music on institutionalized old person and to measure the effect of different ragas, classical music and "om" on psycho- social problems (on bio and psycho- physiological factors) of old aged persons. It was hypothesized that Indian music will manage the Psycho & bio chemical factors of institutionalized old age person and effect of different ragas, classical music and "om" on psycho- social problems will be revealed through the scores obtained by control group on various variables under study. A sample of 71 old age persons was randomly selected from Pali district, Rajasthan, their age ranges were from 65-72 years. Present experimental design is based on ideas and principles of music healing and the framework used by Choi et al. (2008). In present investigation, independent variable is used as musical wrap up (details of Indian music wrap up is given below). Set of dependent variables includes psycho and bio factors measure like- blood pressure, pulse rate, blood glucose and cholesterol. Results reveal significant effect of music on biological functioning were lower systolic blood pressure, lower cortisol levels lower heart rate in men and lower stress response. There is evidence that chronic unhappiness, depression and anxiety can lead to higher blood pressure, decreased immune response, cardiovascular disease risk, diabetes, progression of disability and premature mortality.

Keywords: *Ragas, Classical Music, Om, Psycho- Social Problems, Old Aged Persons*

Music is more all-encompassing now than at any other point in the past, functioning not only as a pleasurable art form, but also serving many important psychological reason. In Indian culture, music has always held a particular place, whereby music has been regarded as a path to achieve deliverance. With time, more than a few things have changed and so has the implication of music also, though, learning music is still look upon not just a leisure pursuit but a regulation inducing activity, enhanced heart rate, Donald, et.al (2002) and Rickard, 2004. Simulative and calming music source transform in heart rate, but these changes were not predictable (Bierbaum, 1958).

¹ Research Scholar, Department of Psychology, J. N. V. University, Jodhpur, India

² Faculty Member, TEPSE & HEPSN Centre, J. N. V. University, Jodhpur, India

*Responding Author

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In one study, simulative music did not modify heart rate, but calming music caused decrease (Iwanaga, et al. 1996). Finally researcher found that music had no effect on heart rate (Gomez & Danuser, 2004; Gupta & Gupta, 2005). Blood pressure is measured by BP Instrument (sphygmomanometer) (Andreassi, 2007). Systolic blood pressure reproduces maximal heaviness in the blood vessels, and diastolic blood pressure reflects minimal heaviness. Blood pressure varies in music listen in situations. (Bernardi et al 2006, Gomez & Danuser, 2004 and Savan, 1999). Self- selected music was efficient in lowering blood pressure. The special effects of music on respiration, both pace and amplitude, have been measured Teng, et al (2007). Number of researches, leading to the following casing up. Simulative music tends to boost respiration and sedative music tends to decrease it (Blood & Zatorre, 2001;). Music analyst believes that a person distress from any medical problem from hypertension and stress to hurt and panic will heal faster if they get a planned dose of music within time. And music therapy is slowly gaining popularity in the city as people look for option ways to get well soon

Objective:

1. To test the effect of Indian music on institutionalized old person.
2. To measure the effect of different ragas, classical music and "om" on psycho- social problems (on bio and psycho- physiological factors) of old aged persons.

Hypothesis:

Indian music will manage the Psycho & bio chemical factors of institutionalized old age person and **effect of different ragas, classical music and "om" on psycho- social problems** will be revealed through the scores obtained by control group on various variables under study.

METHODOLOGY

Design:

Institutionalized old person of experimental group take part in 60 sessions lasting for one month (30 days). Each session was of 45 minutes. Subjects who did not attend the programm regularly their data were not included at the final stage of data analysis. In present investigation, independent variable is used as musical wrap up (details of Indian music wrap up is given below). Set of dependent variables includes psycho and bio factors measure like- blood pressure, pulse rate, blood glucose and cholesterol. At first stage after the establishment of rapport with old age people they were assessed on their DV. The same procedure was repeated after thirty days in the post session. Musical wrap up and was introduced in between the pre and post sessions for 30 days in morning before the breakfast and in evening before the dinner hours.

Present experimental design is based on ideas and principles of music healing and the framework used by Choi et al. (2008). The basic principle of the research is too encouraged and engaged an individual in expressive musical interaction. The starting point for improvisation may be either free or referential. The shared experience is discussed, and the therapeutic process is based on

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the mutual construction of meaning of emerging thoughts, images, emotional content, and expressive qualities as reflected and understood within the context of the psychodynamic framework. 50 old age persons were randomly selected from an institutionalized old age home “Aastha” of Jodhpur city. Authorities of “Aastha” were approached by the researcher of the present research work to get the permission. This old age home is accommodating around 70 old age persons from 65 & above years of age. Old age persons at Astha were availing the facilities of accommodation; tea, breakfast, lunch, dinner. Time to time entertainment programs are arranged by the authority of institutionalized old age home.

Sample:

A sample of 71 old age persons was randomly selected from Pali district, Rajasthan. “Sewa Samiti” at Pali is accommodating 80 old age persons. Their age ranges were from 65-72 years. Due to some dropout, finally 52 persons were included for data analysis.

Procedure:

A musical wrap up is used for present research work. It was an audio package including Indian ragas mainly *Raga Bhairavi* and *Raga Puriya* are used. *Raga bhairavi* is used because it is an entertaining rhythm and it has no specific time, though in few cases it is used in the end of the concerts & traditionally it is a raga of morning time. *Raaga Puriya* is highly effective in calming down the nervous system and it is generally played after 7 pm. in the evening. Apart from this “Om” is also used vocally as well as instrumentally for different duration. Package also contains the natural voices and sounds like Chirping of birds, sound of the flow of a stream/river, wind sounds, waves of sea, waterfalls etc. which are mixed with the “Om, Tiwari (1980) and (Sharma 2009). Researcher meets all participants to build up the rapport and answered all the queries if any. Rapport was established a week ago to start of the research study and exact location & time was also finalized during the process. Physical as well as bio-chemical variables were also measured individually. After this the experimental group participated in the musical therapeutic sessions (total sessions 60, lasting 45 minutes each session). In each session, a musical package was introduced to them which were comfortable for each of them. After the completion of 60 sessions (twice a day before breakfast and before dinner) re-assessment on all the variables of the sample was done. After the meeting held with authorities’ of “Sewa Samitti” old age home of Pali. Researcher meet all participants to build up the rapport and answered all the queries if any. Rapport was established a week ago to start of the research study and exact location & time was also finalized during the process. The researcher finally assessed physical as well as bio-chemical variables. After 30 days, the same assessment was done for the control group. No musical programm for control group was organized after the data collection.

RESULT AND INTERPRETATION*Table 1:- Showing Mean Difference, SD and 't' values for Physical and Bio chemical parameters of Institutionalized Old aged Persons .*

Parameters	Sessions	Mean(difference)	SD	't'
BP (s)	Pre-test Post-test	1.00	11.75	0.34
BP (D)	Pre-test Post-test	6.04	7.89	4.72
Pulse	Pre-test Post-test	5.97	15.58	2.43
Sugar (B)	Pre-test Post-test	17.29	25.61	4.80
Sugar (A)	Pre-test Post-test	3.91	37.17	1.14
Cholesterol	Pre-test Post-test	8.18	24.65	2.76

Analysis of data represents level of systolic blood pressure for experimental group, old age people obtained a mean of 127.88 for pre sessions whereas 126.88 for the post sessions. After introduction of the music, mean difference of both the sessions are not significant at 0.05 level as the 't' value is reported 0.365. It can be said that Indian Music didn't work much effectively as it was hypothesized.

Obtained mean scores for pre session on diastolic blood pressure is = 88.66 and for post session, mean is = 82.62. Significant difference between these two means is reported 't' = 4.72, significant at 0.01 level. It shows that as far as the diastolic blood pressure is concerned, Indian Music worked to manage it. Mean for pre session on Pulse rate is reported= 78.91, whereas for post sessions mean is = 72.13. Mean difference between these two sessions is also reported significant at 0.05 level 't' =2.43. Similarly, mean scores for pre and post session are reported i.e. 97.57 and 80.28 respectively for sugar. Significant difference between these two mean is reported 't' = 4.80, significant at 0.01 level. It also represents the mean scores of post testing of sugar, i.e. for pre session mean=123.53 and for post session mean= 119.62. No significant difference is reported between these two means, t= 1.14.

Apart from this, significant difference between pre and post session is also reported for the level of cholesterol. Mean for pre session= 191.40 and for post session= 183.22 and 't'= 2.76, significant at 0.01 level. It can be concluded that Indian Music is helpful in reducing the level of cholesterol in old age people. On the basis of above data analysis, it can be said that for biological, Social and Psychological factors among old age people, Indian musical package successfully works to some extent.

DISCUSSION

During the present study, specific emphasis is also given on the expression and interaction for inter and intra group communication and their behavioral aspects of old age persons. Elderly people who are institutionalized have unique set of problem and have their own needs. Music therapy can be an effective measure to manage their problems. Music helps them to maintain and improve physical, mental and psychological functions. It can be said that music can be used in re-motivation and reality oriented which initiated a live mood. Research has shown music to be a powerful tool which can evoke memories and assists in recall of past events. Many scientific investigations proved that music is important for over 65 years old people. (Gembris, 2008; Laukka, 2006). Thus music has the ability to influence them. Positive emotions were the most frequently felt reactions to music (Laukka, 2006). Moreover, it was shown that such positive emotions are related to increased well-being. Researchers also identified that old people use different listening strategies which are significantly correlated with well-being. One of the strongest and most important listening strategies amongst other was mood regulation. This indicate that old people knowingly use music to change their mood and thus to increase well-being. But sometimes when old people used music to reflect on negative emotions, music enhanced these negative feelings and sometimes made the subject feel even worse. However, this feeling is worst because music may also help the old people to get rid of their negative moods and at least feel better i.e. catharsis Laukka, (2006).

Significant effects of music on biological functioning were lower systolic blood pressure, lower cortisol levels lower heart rate in men and lower stress response. There is evidence that chronic unhappiness, depression and anxiety can lead to higher blood pressure, decreased immune response, cardiovascular disease risk, diabetes, progression of disability and premature mortality. Musical package and live musical program reduced the level of death anxiety, diabetic; depression, blood pressure, pulse rate Parambiet al (2011).

CONCLUSION

The effect of music on respiration (both rate and amplitude) have been measured a number of studies which lead that simulative music tends to increase to respiration and sedative music tends to decrease it. Hence the hypothesis related to influence of music and live music on Psychological and Social factors (physical and bio-chemical factors) is proved partially. Music has shown its influence on sugar level, cholesterol and pulse rate of old age people.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- American Music Therapy Association. (2011). History of music therapy in the healthcare field. Retrieved on October 1, 2011, from <http://www.musictherapy.org/>.
- Andreassi, J. (2007) Psychophysiology: Human behavior & Physiological response 5th ed. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bernardi, L., Porta, C., & Sleight, P. (2006). Cardiovascular, cerebrovascular, and respiratory changes induced by different types of music in musicians and non musicians: The importance of silence. *Heart*, 92, 445-452
- Bhattacharya, S. 1970. (Mansik Rogon Ke Liya Sangit Chikitsa). *Sangeet*, 36(10-11):7.
- Bierbaum, M. (1958). Variations in heart action under the influence of musical stimuli. Unpublished Master's thesis, University of Kansas.
- Blood , A & Zatorre, R. (2001). Intensely pleasurable responses to music correlate with activity in brain regions implicated in reward and emotions. *PNAS*. (Proceedings of the National Academy of Sciences), 98(20), 111818-11823.
- Carol L. (1997) An exploratory study of musical emotions and psychophysiology *Canadian Journal of Experimental Psychology*, Vol 51(4), Dec 1997, 336-353.
- Choi, A., Myeong, S. & Lim, H. (2008). Effects of group music therapy intervention on depression, anxiety, and relationships in psychiatric patients: A pilot study. *The Journal of Alternative and Complementary Medicine* 14(5), 567-570.
- Gendolla, G. & Krusken, J. (2001). Mood state and cardiovascular response in active coping with an affect- regulative challenge. *International Journal of Psychophysiology*, 41(2), 169-180.
- Gomez, P & Danuser, B. (2004). Affective and physiological responses to environmental noises and music. *International Journal of psychophysiology*, 53, 91-103.
- Guhn , M., Hamm, A., & Zentner, M. (2007) Physiological and music- acoustic correlates of the chill response. *Music Perception*, 24(5), 473-483.
- Gupta, U & Gupta B. (2005) . Psychophysiological responsivity to Indian instrumental music. *Psychology of Music*, 33(4), 363-372.
- Iwanaga, M., Ikeda, M., & Iwaki, T. (1996). The effects of repetitive exposure to music on subjective and physiological response. *Journal of Music Therapy* 33(3), 219-230.
- Krumhansl, C. (1997). An exploratory study of musical emotions and psychophysiology. *Canadian Journal of Experimental Psychology*, 51(4), 336-352.
- Laukka, P. (2006). Uses of music and psychological well-being among the elderly. *Journal of Happiness Studies*, 2007, p. 215-241.
- Nyklicek I., Thayer, J., & Van Doornen, L. (1997). Cardio respiratory differentiation of musically- induced emotions. *Journal of Psychophysiology*, 11, 304-321.
- Parambi Della Grace Thomas, Visakh Prabhakar, Reshmi Krishna. A and Sreeja C. Nair (2011) Rhythms of live: Music therapy for the body, mind and soul. *IJPSR*, Vol. 2,(2) : 237-246 ISSN: 0975-8232.
- Pratt, R. & Spintge, R. (Eds). (1995). *Music Medicine 2*. St. Louis: MMB.

Effect Of Different Ragas, Classical Music and "Om" On Psycho- Social Problems Of Old Aged Persons

- Rickard, N. (2004). Intense emotional responses to music: A test of the physiological arousal hypothesis. *Psychology of Music*, 32(4) 371-388
- Savan, A. (1999). The effect of background music on learning. *Psychology of Music*, 27(2), 138-146.
- Sears, M. (1954). Study of the vascular changes in the capillaries as effected by music. Unpublished master's thesis, University of Kansas.
- Sharma M, (2009) Special Education Music Therapy, Theory and Practice. New Delhi APH Publishing Corporation.
- Teng, X., Wong, M., & Zhang, Y. (2007). The effect of music on hypertensive patients. Conference proceedings of the IEEE Engineering, Medicine and Biology Society, 1, 4649-4651.
- Thayer, J., & Faith, M., (2001), A dynamic systems model of musically induced emotions, In R. Zatorre & I. Refrenes Peretz (Eds). *The neurosciences and music*. Annals of the New York Academy of Sciences, 999, 452-456.
- Tiwari, R. (1980). “ Pandit ONkar Nath Thakur ke Chamatkarik Sangit Anubhav” *Sangeet*. 46:12,21-22,27.

Effect of Classroom Environment on Academic Achievement Motivation

Nihareeka Ranka^{1*}

ABSTRACT

This study will provide information for parents, educators and school administrator to reflect upon various aspects that help students in achieving their academic goals. In so doing, they can investigate the possibility of introducing those factors to their school, which may consequently lead to enhancing students educational outcome in school. Previous studies of Whitaker (2004), explored that main variable in the classroom is not the student, but the teacher. Tyler & Boelter, (2008) teacher expectations as strong and reliable predictors of performance among elementary, middle and high school students. Tyler and Boelter (2008b), positive teacher expectations were associated with high academic performance or academic gains; whereas negative teacher expectations resulted in decrease in academic performance. On basis of these views present study conducted in which Independent variable (IV) was influence of classroom environment and Dependent variable (DV) was academic achievement. Sharma academic achievement motivation test by Sharma (1984) and classroom environment scale (C.E.S) by Joshi and Vyas (1987) were used. Sample of 30 students were taken, all were females and their mean age was 14.67. Finding reveals that some of the factors of classroom environment had positive correlation with academic achievement, hence the hypothesis is partially conformed.

Keywords: *Classroom Environment, Academic Achievement, Motivation*

According to Whitaker (2004), the main factor in the classroom is not the student, but the teacher. Great teachers have high expectations for their students, but even higher expectations for themselves (2004). These teachers recognize the importance of connecting with their students, that if they are unable to connect with them emotionally then it is impossible to effect their mind (2004). “Good teachers put snags in the river of children passing by, and over time, they redirect hundreds of lives... There is an innocence that conspires to hold humanity together ...” (Bolman & Deal, 2002.). Whitaker (2004) reported that teachers are the first most important point of contact in a student’s life. Despite the countless reforms and programs implemented to improve education, no other element can be as profound as the two human element. He urges, “It’s the

¹ PG Student, Department of Psychology, J. N. Vyas University, Jodhpur, India

*Responding Author

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people, not the programs” (Whitaker, 2004,). More profoundly he added, “There are really two ways to improve a school significantly: Get better teachers and improve the teachers in the school”.

Research acknowledges (Tyler & Boelter, 2008) teacher expectations as strong and reliable predictors of performance among elementary, primary and high school students. Other research (Walker Tileston, 2004; Whitaker, 2004) revealed that for many primary grade level students, the classroom environment and the teacher can effect a student’s desire to cheat academically, consider or follow through on dropping out of school, as well as demonstrate a decline in academic performance. Students are influenced by perceptions of their teachers’ impartiality, competence, caring and support as well as the nature of the teacher-student relationship that results (Stipek, 2002).

According to Tyler and Boelter (2008), positive teacher expectations were associated with high academic performance or academic gains; whereas negative teacher expectations resulted in decrease in academic performance.

Teachers need to capitalize on the impact that their positive attitude plays inside the classroom, “the genuine enthusiasm displayed by the instructor is always a major factor in motivation because it is contagious. It engenders a pleasant atmosphere in the classroom and contributes to high motivation” (Miller & Rose, 1975,). Marzano adds, “The quality of teacher–student relationships is the keystone for all other aspects of classroom management” (Marzano & Marzano, 2008,). Reinforcement theorists argue that motivation is in the environment, not in the person such as the teacher (Stipek, 2002). However, it is the teacher who plays the vital role in setting the atmosphere (Whitaker, 2004).

According to Freiberg and Stein (1999), “school climate is the heart and soul of a school”. Stewart (2008) identifies three facets of school climate: school culture, school organizational structure and the school social structure. The school’s culture effects students’ connectedness to their environment which research suggests affects academic achievement. The second element is school organizational structure, which Stewart uses to describe school and class size, both found to lead to positive behavioral and scholastic achievement. The third element Stewart explored was the schools social structure, which includes characteristics such as staff and student ethnicity, gender, socio- economic status, teacher ability and preparation (Stewart, 2008).

Classroom social environment plays an important role in development for school-aged children. Student experiences within the classroom help to develop their behavioral, social, and academic skills. The quality of the interactions that students have with their teachers predicts later academic success (Pianta, Steinberg, & Rollins,1995). Classroom characteristics, such as class composition, student and teacher characteristics, student interactions with peers and teachers,

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classroom values, and classroom beliefs all influence student academic development Pianta, LaParo, Payne, Cox, & Bradley, 2002; Koth, Bradshaw, & Leaf, 2008; Perry, Donohue, & Weinstein, 2007; Because these components may influence student academic futures, it is important to understand the classroom pathways that underlie student academic achievement.

Teacher-student relationship theory Pianta's (1995) posits that teachers shape student experiences in school. Beyond the traditional method and role of teaching academic skills, teachers guide student activity level, teach communication skills, provide opportunities for students to form peer relations, provide behavioral support, and teach coming skills. Teachers have various roles and spend a large amount of time with students. This theory proposes that when 2 teachers have close and positive relationships with students, they are more motivated to spend extra time and energy promoting student success. But when teachers have do not agree and negative relationships with students, they more frequently attempt to control student behavior and thus hinder efforts to promote a positive school environment for them (Pianta et al.,1995; Hamre&Pianta,2001).Furthermore, Hamre and Pianta (2001) assumed that students react to their relationships with their teachers. When students feel that they have close and positive relations with teachers, they are more inclined to trust and like those teachers and thus are more motivated to succeed. In contrast, when students feel that they have conflictual and negative relationships with teachers, they do not like or trust the teachers, are not motivated to succeed and may be defiant towards the teachers (Pianta et al, 1995; Hamre & Pianta, 2001). Many studies have reported that the quality of the relations between teachers and students was associated with student academic performance.

Impact of Classroom Environment

Classroom has great impact on academic achievement. Teacher's attitude and behaviour are vitally important, genuine involvement of student in class activities, flexibility of rules by teachers, communication, competition, staff morale also plays crucial role, use of new techniques, planning various activities - assignments- encouraging creative thinking in student, affiliation between classmates and teacher etc. are various factors which influence academic achievement of students.

Objective

1. The objective of study was to examine the effect of classroom environment on academic achievement of secondary students.

Hypothesis

It was hypothesis that there will be positive correlation between factors involvement, affiliation, teacher support, task orientation, competition, innovation of classroom environment and academic achievement and negative correlation between factors order and organization, rule clarity, teacher control of classroom environment and academic achievement.

METHODOLOGY

Research Design

An attempt was made to study the influence of classroom environment on academic achievement of secondary school student in which Independent variable (IV) is influence of classroom environment and Dependent variable (DV) is academic achievement. All the subject were matched at their age range, socio-economic status and family background.

Sample

Principles of two schools were approached and they were explained about the purpose of research. Then 65 students were introduced to the research problem, finally 30 students voluntary came forward for research work.

Tool

A) Sharma academic achievement motivation test by T. R. Sharma (1984).

Reliability of Academic Achievement Motivation Test

The reliability of the achievement motivation test was determined by three methods i.e. Split-half, Rational Equivalence and Test-Retest method. The reliability of split-half method was established with the total $N = 100$. The score of odd items was 1355 and an even item was 1400. The reliability of split-half test was found to be 0.53 and whole test was 0.697. The reliability of rational equivalence method was found that $r = 0.75$. The reliability of test-retest method was found to be 0.795 for boys (298) and 0.80 for girls (301).

Validity of Academic Achievement Motivation Test

Three types of validities – content, criterion and construct, were established. The item of the test was selected on the basis of pooled judgment of nearly forty experts in the field of testing. This sufficed for content validity. For criterion validity, on the basis of considered judgments of class teachers, twenty students; ten low on achievement motivation and ten high on achievement motivation were administered this test under standardization. Significant differences ($t = 6.30$) were found in the mean test-scores of the two groups. For construct validity, SK Boys = -0.4315, SK Girls = -0.4189 and Ku Boys = 0.2280, Ku Girls = 0.3612 were represented normally distributed score in the test.

B) Classroom Environment scale (C.E.S) by Joshi and Vyas (1987).

Reliability of classroom environment scale Reliability index for each sub-scale of classroom environment scale represents test retest reliability i.e. Involvement: 0.803, affiliation: 0.792, teacher support : 0.831, task orientation: 0.842, competition: 0.863, order and organization: 0.801, rule clarity: 0.830, teacher control: 0.799, innovation: 0.840

Validity of classroom environment scale

The construct validity in each case of positive correlation, range between 0.347 to 0.546. This coefficient is calculated against saxena sub-scale of school environment scale (SES).

RESULT

Correlation values between academic achievement motivation and subscales of classroom environment for sample of girls and girls of co-education school

Schools	I	A	T.S.	T.O.	C	O.O.	R.C.	T.C	Inn.
Girls	-.05 N.S.	-.18 N.S.	-.05 N.S.	.06 N.S.	-.42**	-.14 N.S.	-.05 N.S.	-.38**	-.02 N.S.
Coeducation	-.03 N.S.	-1.0 N.S.	.14 N.S.	.65**	-.11 N.S.	.26*	-.47**	.33**	.004 N.S.

*(P<.05) **(P<.01) N.S.= Non-significant

Where,

(I=Involvement, A=Affiliation, Ts=Teacher Support, To=Task Orientation, C=Competition, Oo=Order And Organization, Rc=Rule Clarity, Tc=Teacher Control)

DISCUSSION

The result of present study indicates negative and significant relationship on two sub-scale of classroom environment i.e. Competition ($r = -.42$, $p = .01$) and Teacher control ($r = -.38$, $p = .01$). It represent that characteristics such as spirit of giving your best , urge to excel , strict rules , authoritarian teaching are negatively associated with characteristics like high aspiration , ambitious nature , high level of motivation , excel in academics among subjects of girls school. Whereas, correlation analysis among co-educated girls group has shown significant and positive correlation on two sub-scale of classroom environment i.e. Teacher control ($r = .33$, $p = .01$) and Task orientation ($r = .65$, $p = .01$). Negative and significant on Rule clarity ($r = -.47$, $p = .01$) with academic achievement motivation and there is no significant relationship for rest of the sub-scale of classroom environment with academic achievement motivation.

The findings of present research are in line with Whitakar (2004) who reported that the main factor in the classroom is not the student, but the teacher. He further added that Great teachers have high expectations for their students, but even higher expectations for themselves. Similarly Bolman and Deal,(2002) evaluated that good teacher as well as good teaching positively influences academic performance of student. Students are influenced by perceptions of their teachers' evenhandedness, competence, caring and support as well as the nature of the teacher-student relationship that outcome in (Stipek, 2002), this conclusion is supported by present findings.

Tyler and Boelter (2008), positive teacher expectations were associated with high academic performance or academic gains; whereas negative teacher expectations resulted in decrease in academic performance, is also in collaboration with present analysis of the findings.

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Present findings are also in support of Ames et al. (1998). Students who perceived an emphasis on mastery goals in the classroom reported using more effective strategies, preferred challenging tasks, had a more positive attitude toward the class, and had a stronger belief that success follows from one's effort. Students who perceived performance goals as salient tended to focus on their ability, evaluating their ability negatively and attributing failure to lack of ability. Koth et al. (2008). Researchers have examined the influence of various classroom characteristics on student academic performance. Teacher beliefs, teacher instructional practices, and classroom interactions between teachers and students have been positively associated with student academic performance, is also in support with the present study. Present hypothesis are partially confirmed hence it is concluded that some of the classroom factor played significant role in achievement motivation.

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Conflict of Interests

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REFERENCES

- Ames, Carole; Archer, Jennifer (1998). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology*, 80(3).
- Freiberg, H.J., & Stein, T.A. (1999), "Measuring, improving and sustaining healthy learning environments", in Freiberg, H.J. (Eds), *School Climate: Measuring, Improving and Sustaining Healthy Learning Environments*, Falmer Press, London, pp.11-29.
- Joshi, Vyas (1987). Classroom environment scale, rupa psychological centre B. 19/60 B, Deorabir, Bhelupur, Varanasi-221010.
- Koth, C. W., Bradshaw, C. P., & Leaf, P. J. (2008). A multilevel study of predictors of student perceptions of school climate: The effect of classroom-level factors. *Journal of Educational Psychology*, 100, 96-104.
- Phuong, A. (2009). The influences of classroom characteristics and teacher-student relations on student academic achievement. University of Maryland.
- Pianta, R.C. (2001) Student-teacher relationship scale: Professional manual. Psychological Assessment Resources, Inc. Lutz, FL.
- Pianta, R.C., Steinberg, M. S., & Rollins, K.B. (1995). The first two years of school: Teacher-child relationships and deflections in children's classroom adjustment. *Development and Psychopathology*, 7, 295-312.
- Sharma (1984). Sharma academic achievement motivation test, National psychological corporation, Agra-282003.
- Tisome, T.N. (2009). The impact of teacher-student interaction on student motivation and achievement. University of central Florida Orlando, Florida.

Effect of Classroom Environment on Academic Achievement Motivation

- Tyler, K., & Boelter, C., (2008). Linking Black Middle School Students' Perceptions of Teachers' Expectations to Academic Engagement and Efficacy. *Negro Educational Review*, Spring 2008.
- Whitaker, Todd. (2004). *What Great Principals Do Differently*. Larchmont, NY: Eye On Education, Inc.

Need for Empowering the Caregivers of the Elderly through Educational Intervention and Counselling

Meha Mathur^{1*}, Dr. Meenakshi Mathur²

ABSTRACT

Care givers are the one who takes care of the elderly suffering from chronic illness or disease managing their medications, helping to bathe or dress. For a care giver it is important to have complete knowledge and skills of care giving so that they can provide proper care giving to the elderly. A study was conducted on the care givers of elderly patient. During the survey 40 care givers were observed. In the study we found that educational intervention and counselling is required for care givers on the following aspects such as self care, nursing care, fall prevention, physiotherapy and nutritional care.

Keywords: Care Givers, Elderly, Educational- Intervention, Counselling

Empowering means to increase the social, economic, political and legal strength and ability of an individual. To give them equal rights, status and opportunity in all the aspects of life and to live freely with respect and dignity. To have complete control on their life and make their own decisions and choices. To have rights to get their voices heard.

Need for Empowerment

The need for empowerment is common for each individual in the society. They are:

- To freely live their life with a sense of self-worth, respect and dignity
- To have complete control of their life, both within and outside of their home and workplace.
- To make their own choices and decisions
- To have equal rights to participate in social, religious and public activities
- To have equal social status in the society
- To have equal rights for social and economic justice
- To determine financial and economic choices
- To get equal opportunity for education
- To get equal employment opportunity without any gender bias
- To get safe and comfortable working environment (1)

¹ Research Associate, Asian Centre for Medical Education Research & Innovation (ACMERI) Jodhpur, Raj., India

² Prof. & Head, Dept. of Home Science, J. N. Vyas University, Jodhpur, Raj., India

*Responding Author

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As we talk about empowerment we do not only mean empowerment of educated, working and earning people but it also includes empowerment of those also who are uneducated, unemployed, non-earning, underprivileged and most importantly the one who is staying at home doing multiple tasks like doing household work, taking care of children, managing the social responsibilities, following traditions and rituals and also taking care of elderly members of the family. The one who is unpaid and takes care of the elderly at home are the care givers who needs to be trained and educated, their empowerment through educational intervention is must irrespective of their socio- economic status, educational background, gender etc.

Wikipedia has described “A **caregiver or career** is an unpaid or paid person who helps another individual with impairment with his or her activities of daily living. Any person with health impairment might use caregiving services to address their difficulties. Caregiving is most commonly used to address impairments related to old age, disability, a disease, or a mental disorder. Typical duties of a caregiver might include taking care of someone who has a chronic illness or disease; managing medications or talking to doctors and nurses on someone's behalf; helping to bathe or dress someone who is frail or disabled; or taking care of household chores, meals, or bills for someone who cannot do these things alone. With an increasingly aging population in all developed societies, the role of caregiver has been increasingly recognized as an important one, both functionally and economically. Many organizations which provide support for persons with disabilities have developed various forms of support for careers as well.”

Besides the general need of empowerment there are some additional needs for the care givers of the elderly patients at home

- To get rid of their isolation
- To overcome the feeling for being neglected
- To conquer the fear of under care and death of elderly
- To rise above the boredom and monotonous routine.

The Challenges and Problems of Caregivers

The more challenging the patients' needs, the more complex, demanding, and stressful the caregiver's role might be. Stress may be constant as caregivers must flex and adjust to sudden changes and abnormal situations to accommodate their patients' needs. Care giving can often be undervalued by those who have never served in that role. Caregivers need to have a lot of patience and stamina; and knowledge of health-care terms, medical conditions, and medications, because they often need to work through family situations, crises, and life-threatening events related to their family members. (2)

Problems faced by the caregivers of elderly are:(3), (4)

- Anxiety
- Neglect
- Stomach and digestive problems
- Weight gain or loss

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- Burnout
- Mood swings
- Irritability
- Depression
- Self-neglect
- Chronic stress
- Family conflicts
- Excessive alcohol or drug use
- Premature institutionalization of the patient
- Failure to meet their own emotional and personal needs
- Disturbed sleep
- Back, shoulder or neck pain
- Headaches
- Loss of hair
- Fatigue
- High blood pressure, irregular heartbeat, palpitations
- Chest pain
- Perspiration
- Skin disorders
- Periodontal disease, jaw pain
- Reproductive problems or infertility
- Weakened immune system suppression
- Sexual dysfunction or lack of libido
- Memory problems

The care givers of the elderly are facing the above mentioned problems. If these problems persist for longer time it is injurious for the health of care giver and the family as a whole.

According to Gorman (1999) "The ageing process is of course a biological reality which has its own dynamic, largely beyond human control. However, it is also subject to the constructions by which each society makes sense of old age. In the developed world, chronological time plays a paramount role. The age of 60 or 65, roughly equivalent to retirement ages in most developed countries, is said to be the beginning of old age. In many parts of the developing world, chronological time has little or no importance in the meaning of old age. Other socially constructed meanings of age are more significant such as the roles assigned to older people; in some cases it is the loss of roles accompanying physical decline which is significant in defining old age. Thus, in contrast to the chronological milestones which mark life stages in the developed world, old age in many developing countries is seen to begin at the point when active contribution is no longer possible." (5)

Educational intervention is a methodology to modify the physical, intellectual and moral development of the individual through the process of training, counselling, workshop, or introduction of new project, curriculum etc.

Counselling is the process that occurs when a client and counsellor set aside time in order to explore difficulties which may include the stressful or emotional feelings of the client. It includes the act of helping the client to see things more clearly, possibly from a different view-point. This can enable the client to focus on feelings, experiences or behavior, with a goal to facilitating positive change. It is a relationship of trust and confidentiality. (6)

Pilot study on Educational Intervention and Counselling for Care givers of Elderly

A need based study was conducted to understand the problems of care givers of the elderly patients suffering from strokes. During the survey 40 families were visited who had elderly patients at their home. Prior written consent was taken from them. Out of 40 care givers 27 were female and 13 were male. The average age ranges of the care givers were between 24 to 86 years. The types of problems reported were varied and numbers of problems reported were also varied ranging from 1-3 to 7-10. The major problems reported by the female care givers were knee- pain, back pain, joint pain, headache, lack of sleep, acidity, cervical spondylitis, no self-care, socially inactive, improper energy management, improper time management, overburdened, frustration, depression, improper eating timings and habits and hygiene negligence. On the basis of above study it was observed that educational intervention and counselling for the care givers were required. A module was prepared to provide knowledge and counseling to the care givers. This model was prepared after discussions from team of physiotherapist, doctors, nurses, old age home staff, counselors, dietitians and nutritionist In this module aspect covered were self care, nursing care, fall prevention, nutritional care and physiotherapy. The module prepared covers the following:

Self-Care:

Caring for yourself is one of the most important—and one of the most often forgotten—things you can do as a caregiver. When your needs are taken care of, the person you care for will benefit too. The care giver needs to take care of his

- Nutritive meals on proper time
- Personal hygiene
- Proper medication (if any)
- Proper exercise
- Sound sleep for 8 hours
- Sharing of responsibilities
- Managing social pressure
- Avoid neglecting self needs and requirements.
- Proper time management
- Proper energy management

Nursing Care

Nursing care is very important aspect of care giving especially for the bed ridden patients, they need assistance in bathing, dressing and body care. A proper nursing care will help the elderly to be more healthy and comfortable.

- Oral care
- Bathing
- Nail care
- Skin care

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- Hair care
- Cloths care
- Bedding care
- Bedsore care (if any)
- Utensil care
- Hygienic maintenance of living area
- Assistive device care
- Bowl and bladder care
- Bed –pan, urinal and catheter care

Fall Prevention:

According to the researches it is observed the fall is the major cause of the injury among the people age 60 and above. Falls are the number one causes of injury, hospital visits due to trauma and death. There are many different factors that can increase the risk of falling. To prevent the fall following points should be kept in mind. (7)

- Use of walking devices
- Use of railings and bars
- Room should be spacious
- Room should be obstacle free
- Non slippery floor
- Non slippery footwear's
- Eyesight check

Physiotherapy:

The benefits of physiotherapy for seniors include restoring and maintaining mobility, balance, and a level of physical activity. Physiotherapy may be the secret to sustaining a completely independent lifestyle at home. Research indicates that the ability to maintain physical function also improves overall health by enhancing psychological and social well-being. The longer individuals maintain a physically active lifestyle, the longer they enjoy a healthy life of independence. (8)

- Active upper limb exercises
- Active lower limb exercises
- Passive upper limb exercises
- Passive lower limb exercises
- Balancing exercises

Nutrition

A healthy diet with vital nutrients can help ward off potential. Health problems that are common with advancing age like constipation, heart problems, diabetes, high blood pressure, increase

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cholesterol level can be controlled through dietary modification. Nutritional diet will also help to maintain a healthy life.

- Water intake
- Timing of food
- Number of meals
- Interval between the meals
- Consumption of salt, sugar and spices
- Consumption of fats, oil and ghee
- Consumption of milk and milk products
- Consumption of Fruits and vegetables
- Consumption of alcohol and tobacco
- Form of food- solid/ semi- solid/ liquid

The module is prepared and now it can be implemented on the care givers of the elderly patients.

CONCLUSION

On an airplane, an oxygen mask descends in front of you. What do you do? As we all know, the first rule is to put on your own oxygen mask before you assist anyone else. Only when we first help ourselves can we effectively help others. Caring for yourself is one of the most important—and one of the most often forgotten—things you can do as a caregiver.(9) When your needs are taken care of, the person you care for will benefit too. It is very important to for the care givers of the elderly to be aware of the best care giving practices for the elderly patients at home. In our pilot study conducted on the 40 families of care givers who have elderly patients at home, we observed the need to educate them on the following aspects such as self care, nursing care, fall prevention, physiotherapy, and nutrition care. The study conducted was on care giver of the elderly patients but the comprehensive module prepared is suitable for care givers of elderly, suffering from general as well as acute health problems.

Acknowledgments

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Conflict of Interests

The author declared no conflict of interests.

REFERENCE

1. Importantindia.Com, Revisited from: <http://www.importantindia.com/19050/essay-on-women-empowerment/>
2. Rdhmag.Com, Revisited from: <http://www.rdhmag.com/articles/print/volume-32/issue-08/features/the-challenges-of-caregivers.html>

Need for Empowering the Caregivers of the Elderly through Educational Intervention and Counselling

3. Apa.Org, Revisited from: <http://www.apa.org/pi/about/publications/caregivers/practice-settings/common-problems/>
4. DisabledWorld.Com,Revisitedfrom:<https://www.disabledworld.com/disability/caregivers/caring-challenges.php>
5. Gorman M. Development and the rights of older people. In: Randel J, et al., Eds. The ageing and development report: poverty, independence and the world's older people. London, Earthscan Publications Ltd.,1999:3-21.
6. Skillsyouneed.Com,Revisitedfrom:<http://www.skillsyouneed.com/general/counselling.html#ixzz4SKZczUPI>
7. Stopfalls.Org , Revisited from: <http://stopfalls.org/what-is-fall-prevention/>
8. Wisegeek, Revisited from <http://www.wisegeek.com/what-are-the-benefits-of-physiotherapy-for-the-elderly.htm>
9. Caregiver.Org, Revisited from <https://www.caregiver.org/taking-care-you-self-care-family-caregivers>

Effect of Cognitive Behaviour Therapy on Quality of Life of Alcoholic Dependents

Dr. Priyanka^{1*}

ABSTRACT

Alcoholism is a global phenomenon. The consequences of alcoholism remain the same everywhere with little variation in the magnitude. In the present study, an attempt has been made to study the effect of cognitive behaviour therapy on quality of life of alcoholic dependents. This is a field experimental study in which the alcoholic dependents were given Cognitive Behaviour Therapy before and after administration of Quality of Life Scale. In the present research, cognitive behavior therapy was taken as the independent variable and quality of life was taken as dependent variable. The incidental purposive sampling technique was used in the selection of the sample. 60 alcohol-dependent patients were taken as a sample whose age ranged between 25 – 38 years. Results revealed that cognitive behaviour therapy has no impact on the psyche of the subjects because when they were getting opportunities for acquiring new information & skills, they were not able to make use of their thinking, learning, memory & concentration. They were possessing faith in religion & were thinking that the almighty will be taking care of them. It also shows that the subjects were reluctant and do not want to change their lifestyle.

Keywords: *Cognitive Behaviour Therapy, Alcoholic, Quality of life*

Alcoholism is a global phenomenon. The consequences of alcoholism remain the same everywhere with little variation in the magnitude. It is apparent that alcoholism is not the problem of only a small segment of the population but it has far reaching consequences in almost all walks of life. It has affected the lives of young and old, men and women. It is apparent that the menace of alcoholism especially affects the youth, particularly in the age group of 21 to 30 years under different factors. The main cause of alcoholism is peer pressure, curiosity, frustration, depression, feel good, party sake, failure, family problems and poor quality of life (Tripathi, 2010).

CBT for alcoholic dependents captures a broad range of behavioural treatments including those targeting operant learning processes, motivational barriers to improvement and a traditional

¹ Assistant Professor of Psychology, Government College, Pali, Raj., India

*Responding Author

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variety of other cognitive-behavioural interventions (McHugh et al. (2010). Overall, these interventions have demonstrated efficacy in controlled trials and may be combined with each other or with pharmacotherapy to provide more robust outcomes.

Srivastava and Bhatia (2013) found significant improvement in QoL of patients with alcohol dependence over three months' abstinence. The physical, psychological, social, and environment domains of QoL in alcohol dependence subjects were significantly lower before treatment initiation than the healthy controls. Alcoholic liver disease emerged as a predictor of improvement in psychological and social domains of QoL.

The study confirms the poor quality of life in patients with alcohol dependence before the intervention. The regular follow-up with the family members in out-patient setting enables the patients to achieve complete abstinence, thereby improving their quality of life.

To conclude, the present study found poor quality of life in alcohol-dependent Indian patients before treatment initiation. The regular follow-up in an outpatient setting along with the caregivers improve the compliance and enables the patients to pursue their work and take up other responsibilities. This enhances the self-esteem and achieves complete abstinence, thereby improving their quality of life.

Findings stress the need for public health officials to incorporate quality of life as an important measure to evaluate treatment outcome in alcohol dependence whose natural course consists of relapses. Treatment of alcohol dependence with a favorable outcome is possible with minimal financial resources, regular follow-up, and the involvement of caregivers. There is a need to create general awareness in public that alcohol dependence is a disorder that requires immediate attention.

Lahmek et al. (2009) revealed that QoL improvement after a residential treatment was related to low QoL scores at admission. Improvement in the physical component of QoL was related to baseline alcohol intake and good somatic status. Improvement in mental component of QoL was related to other drugs abuse/dependence.

Statement of Problem

Keeping the above views the following problem is taken - *Effect of Cognitive Behaviour Therapy on Quality of Life of Alcoholic Dependents*.

Objectives

1. To assess the quality of life among alcohol dependents.
2. To examine the effect of cognitive behaviour therapy on quality of life of alcohol dependents.

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Hypotheses:

For the present research process, the following alternative hypotheses were formulated -

1. Alcohol dependents will be having a poor level of quality of life.
2. There will be an improvement in the perceived quality of life after cognitive behavior therapy.

The rationale behind these hypotheses is based on the studies of Chubon (1985), Chaturvedi et al. (1997).

Design:

This is a field experimental study in which the alcoholic dependents were given Cognitive Behaviour Therapy before and after administration of Quality of Life Scale. In the present research, cognitive behavior therapy was taken as the independent variable and quality of life was taken as dependent variable. The design of the research is as follows -

Group	Pre-Test	Treatment	Post Test
Alcohol Dependents	Administration of Quality of Life Scale	Cognitive Behaviour Therapy (3 times in a week for 40 min.)	Administration of Quality of Life Scale

Tool:

For the present research study quality of life scale was the main tool selected and used for collecting the data. A brief description of these is given below –

1. **WHOQOL-BREF Scale of Orley (1996):** This scale measures the quality of life that looks at domain level profiles – Physical Health, Psychological, Social Relationships and Environment.

a. Physical Health – Activities of daily living, Dependence on medicinal substances and medical aids, Energy and fatigue, Mobility, Pain and discomfort, Sleep and rest, Work Capacity.

b. Psychological – Bodily image and appearance, Negative feelings, Positive feelings, Self-esteem, Spirituality/Religion/Personal beliefs, Thinking, learning, memory and concentration.

c. Social Relationships – Personal relationships, Social support, Sexual activity.

d. Environment – Financial resources, Freedom, physical safety and security, Health and social care: accessibility and quality, Home environment, Opportunities for acquiring new information and skills, Participation in and opportunities for recreation/leisure activities, Physical environment (pollution/noise/traffic/climate), Transport.

Sample

The incidental purposive sampling technique was used in the selection of the sample. 60 alcohol-dependent patients were taken as a sample whose age ranged between 25–38 years. The educational level for all the subjects was metrics and above. Only those alcohol-dependent patients were selected, who have been diagnosed as alcohol dependent by Psychiatrist. The

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sample was drawn from Psychiatry Department, MDM Hospital, Jodhpur and Centre for De-addiction, Manaklao. Before selection of the sample, permission was taken from the authorities.

Procedure:

Each subject was given the scale individually by the investigator. The scale was administered under proper and adequate testing conditions. All the instructions were strictly followed, which was given by the authors of the scale in the manual. Session of test ended with an expression of thanks to the subjects for their cooperation. All the subjects were given Cognitive Behaviour Therapy between Pre Test and Post Test Sessions. It was three times in a week and of 40 minutes for each session.

Scoring:

Scoring of the obtained data of the scale was done with the help of manual available for the scale used. After tabulating the scores, the data was statistically analyzed, for a significant difference.

RESULTS AND DISCUSSION

Table – 1: Showing Mean, SD and ‘t’ scores on Physical Health dimension of Quality of Life.

Sessions	Measures	Values
Before (N=60)	M	17.80
	SD	3.38
After (N=60)	M	18.51
	SD	3.61
	t	1.12

**p<0.01, *p<0.05, NS=Not Significant.

Table – 2: Showing Mean, SD and ‘t’ scores on the Psychological dimension of Quality of Life.

Sessions	Measures	Values
Before (N=60)	M	9.76
	SD	3.47
After (N=60)	M	9.58
	SD	3.69
	t	.28

**p<0.01, *p<0.05, NS=Not Significant.

Table – 3: Showing Mean, SD and ‘t’ scores on Social Relationships dimension of Quality of Life.

Sessions	Measures	Values
Before (N=60)	M	6.78
	SD	2.16
After (N=60)	M	7.01
	SD	2.41
	t	.55

**p<0.01, *p<0.05, NS=Not Significant.

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Table – 4: Showing Mean, SD and ‘t’ scores on Environment dimension of Quality of Life.

Sessions	Measures	Values
Before (N=60)	M	20.71
	SD	3.93
After (N=60)	M	21.55
	SD	3.62
	t	1.20

**p<0.01, *p<0.05, NS=Not Significant.

Tables 1 to 4 indicates that on Quality of Life Scale the alcohol dependents have obtained higher mean scores in post-test session on PH. (M = 18.51, SD = 3.61), SR. (M = 7.01, SD = 2.41) and E. (M = 21.55, SD = 3.62) as compared to their pre-test sessions (M = 17.80, SD = 3.38), (M = 6.78, SD = 2.16), (M = 20.71, SD = 3.93) respectively. But no significant difference was found between both the sessions on PH. (t = 1.12), SR. (t = .55), E. (t = 1.20) which reveals that CBT has no effect in post-test session as the subjects were still dependent on medicinal substances & medical aids as in pre-session. After CBT, no significant change is reported among the subjects for their quality of life. Hence, the characteristics like experiencing pain & discomfort, often feeling fatigue & sleepy & their working efficiency were affecting. As far as personal relationship & sexual activity is concerned, it was also found to be similar in both the sessions. The home environment, financial resources & social support also did not improve as cognitive behaviour therapy had any impact on quality of life of the subjects. The quality of life as regard to health & social care was accessible as before. On dimension P. of Quality of Life Scale the alcohol dependents have obtained higher mean scores in pre-test session (M = 9.76, SD = 3.47) than in post-test session (M = 9.58, SD = 3.69). The insignificant difference was found between both the sessions on P. (t = .28). Here also, CBT has no impact on the psyche of the subjects because when they were getting opportunities for acquiring new information & skills, they were not able to make use of their thinking, learning, memory & concentration. They were possessing faith in religion & were thinking that the almighty will be taking care of them. It also shows that the subjects were reluctant and do not want to change their lifestyle.

The present findings seem to be in support with Srivastava & Bhatia (2013) which confirms the poor quality of life in patients of alcohol dependence before the intervention. The regular follow-up with the family members in out-patient setting enables the patients to achieve complete abstinence, thereby improving their quality of life. Bharadwaj and Sharma (1997) stated that emotional in competencies may disturb the emotional reactivity of an adolescent that may lead to serious consequences and desire to be more dependent on alcohol in coping with life, escape from boredom, relief from pain, stress and strain, just to maintain a high sense of self-esteem and to expand ones' consciousness. Thus, the problems in adjustment appear to be an altered state of the individual that arises as a consequence of adaptive failure and non-adaptive challenge. It can be classified as frustration, conflict and pressure, all of which are closely related. It is a necessary positive force leading to effective work and maintenance of good health.

CONCLUSION

Thus, it can be concluded that alcohol addicts, in particular are the sick people; they are a part of society and require special attention. The Indian approach fully recognizes that in a traditional society, social support is a vital input in bringing the erring individuals back to the mainstream. As alcohol addiction is not merely a medical problem, it has to be treated in the totality of the life situations of the addict.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Bharadwaj, R. & Sharma, A. (1997). Emotional competencies among chemical dependents and non-dependents: A comparative study. *Journal of the Indian Academy of Applied Psychology*, 23(1-2): 19-22.
- Chaturvedi, H. K., Bajpai, R. C. & Pandey, A. (1997). Correlates and gender differentials of opium use among tribal communities. *Neuropathology of Drug Addictions & Substance Misuse*, 2: 1036-1045.
- Chubon, R. A. (1985). The quality of life measurement of persons with back problems: Some preliminary findings. *Journal of Applied Rehabilitation Counselling*, 16: 31-34.
- Lahmek, P., Berlin, I., Michel, L., Berghout, C., Meunier, N. and Aubin, H. J. (2009). Determinants of improvement in the quality of life of alcohol-dependent patients during an inpatient withdrawal programme. *Int J Med Sci.*, 6 (4): 160–167.
- McHugh, R. K., Hearon, B. A. & Otto, M. W. (2010). Cognitive-Behavioral Therapy for Substance Use Disorders. *Psychiatr Clin North Am.*, 33(3): 511-525.
- Orley, J. (1996). *Manual of WHOQOL-BREF Scale*. Programme on Mental Health. Geneva, WHO.
- Srivastava, S. and Bhatia, M. S. (2013). Quality of life as an outcome measure in the treatment of alcohol dependence. *Ind Psychiatry J.*, 22(1): 41–46.
- Tripathi, S. K. (2010). Reactions to frustration and family environment among drug dependents. Unpublished Ph. D. Thesis. Jodhpur, Department of Psychology, Jai Narain Vyas University.

Rehabilitation of Mentally Retarded Children through Environmental Protection

Dr. Manisha Jain^{1*}

ABSTRACT

In the present study an attempt has been made to give training to mentally retarded children in paper bag making. Five mentally retarded children having the mental age of 6 - 7 years were selected for the above purpose from Jodhpur city. It was hypothesized that the children will be able to make paper bags as taught by the vocational trainer. It was a co-relational type of research. A comparison of before and after training revealed the degree of change in the children's performance. Material used in the present study were newspaper and gum. After training a remarkable improvement was seen in the children's performance. As the trials increased, the number of errors decreased. Results also reveal that persons with mental retardation can be engaged in economically useful activities if systematic training and guidance is given.

Keywords: *Mentally Retarded Child, Environmental protection*

Mentally retarded children are often characterized as those who consume services rather than those who contribute to the community. A consumer of services is always viewed as being dependent upon the charity of others. Rehabilitation assists in removing this image and placing them in the role of contributor. Work is important as a means to earn wages, and through wages one can assess the contribution by them towards the quality of life. Work also means personal identity and status. Vocational training assists in removing their image and placing them in the role of contributor of environment protector (Jain and Gunthey, 2007).

Rehabilitation is defined as a process of restoring the handicapped individual to the fullest physical, mental, emotional, social, and vocational usefulness for which he is capable. Hence it includes processes, procedures and programmes, which are designed to enable the affected individual to function at a more adequate and personally satisfying level.

¹ Department of Psychology, Jai Narain Vyas University, Jodhpur, India

*Responding Author

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Rehabilitation of Mentally Retarded Children through Environmental Protection

Because the individual before disablement had developed higher level of functioning but due to certain unfortunate events, functions are lost fully or partially and rather permanently. Therefore needs to have rehabilitation programmes to re-educate him or her so that the person can be returned back to the main stream of normal life.

When parents learn about any difficulty or problem in their child's development, this information comes as a tremendous blow. They begin a journey that takes them into a life that is often filled with strong emotion, difficult choices, interactions with many different professionals and specialists, and an ongoing need for information and services. Initially, parents may feel isolated and alone, and not know where to begin their search for information, assistance, and understanding and support (Mathur and Mathur, 2007).

Employers may hesitate to recruit, hire and train individuals with mental retardation because they are not sure that they know how to accommodate their disability. Parents may have low expectations of work for their sons and daughters with mental retardation. They may worry that going to work may cause their son or daughter to lose entitlements which provide a monthly income and health coverage.

The basic aim of vocational training is to teach independent learning skill and to make them self-dependent. Looking to the competition era in the present scenario of the society, such type of skills are essential to run the life. Not only to the normal youth as well as disabled youth too, it is very clear that a mentally challenged child faces many problems to stand in this competitive world. He needs special training. He requires special type of skill, looking to his limited intellectual level. This type of training starts from the family from the person itself and the society in which the child is living.

Environmental protection is a practice of protecting the environment, on individual, organizational or governmental level, for the benefit of the natural environment and (or) humans. Due to the pressures of population and our technology the biophysical environment is being degraded, sometimes permanently. This has been recognized and governments began placing restraints on activities that caused environmental degradation. Since the 1960s activism by the environmental movement has created awareness of the various environmental issues. There is not a full agreement on the extent of the environmental impact of human activity and protection measures are occasionally criticized. Academic now offer courses such as environmental studies, environmental management and environmental engineering that study the history and methods of environmental protection. Protection of the environment is needed from various human activities. Waste, pollution, loss of biodiversity, introduction of invasive species, release of genetically modified organisms and toxics are some of the issues relating to environmental protection.

Rehabilitation of Mentally Retarded Children through Environmental Protection

Similar studies have been done by Kutty (2006), Mathur and Mathur (2007), Rao and Sivakumar (2004). Therefore, the present research work aimed to study rehabilitation of mentally retarded children through environmental protection.

The **objectives** of the present research were to find out the effect of continuous training programme among mentally retarded children regarding the development of paper-bag making skills, the effect of verbal reinforcement in the development of these skills and the effect of vocational rehabilitation on control of environmental pollution. It was **hypothesized** that continuous and rigorous training will be helpful in the development of vocational skills and environmental protection through paper-bag making. Time to time positive reinforcement will motivate the children to improve their performance.

METHODOLOGY

Research Design

For the present research work single group design was taken. The children were purposively selected. Rigorous & regular training of 1 hr was given to the children. In this training a series of demonstrations of making paper bags was given by the vocational trainer. The training program was distributed in parts as required in the nature of the task. Preferably chain work procedure was used for a proper coordination of the work among the children. After providing them adequate training of making paper bags, independent job work was allotted to them and time to time feedback was taken. The present research work was completed in two sessions i.e. the assessment of the mentally retarded children before the training as well as the assessment after the respective vocational training.

Pre-Test Measuremen t of various skills on paper bag making for four days	Application (Treatment) 30 days	Post Test 1 (immediatel y after application) Measuremen t of various skills on paper bag making	Post Test 2 (after post test 1) Measuremen t of various skills on paper bag making	Withdrawal of 15 days	Post Test 3 (immediatel y after withdrawal) Measuremen t of various skills on paper bag making	Reapplication (Treatment) 15 days	Post Test 4 (immediatel y after reapplication) Measuremen t of various skills on paper bag making
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The difference between before and after training assessment was revealed the impact of vocational training. This is a field experiment study in which training is used as independent variable whereas development of vocational skills and environmental protection is used as a set of dependent variables. The training was carried out on the subjects under similar conditions to

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control the situational relevant variable. The same sequence of task analysis was followed by the subjects in both the sessions to control the sequence relevant variable.

Sample

In the present research work purposive sampling technique was used. Five mild mentally retarded children were selected. The age range of the children was 15 - 18 years. They were the students of TEPSE Model School, Jai Narain Vyas University, Jodhpur.

Tool Used

A self constructed rating scale was used to assess the skills of the children. The scale was constructed on the basis of items in the respective areas of BASIC – MR of Peshawaria & Venkatesan (1992) and MDPS of Vimala (1992). The responses were taken on items if the child is independent or occasional cue, gestural prompt, verbal prompt or physical prompt is given.

Material required for making paper bags

For paper bag making newspaper and gum bottle were used.

Steps followed in making paper bags

In present vocational training of paper-bag making, the following steps were followed:

1. With the help of behaviour modification technique, desirable behaviour was encouraged and other behaviour was discouraged.
2. The confidence level of the children was boosted up and then training was started. Demonstration was given to the children for several times. During the demonstration the following precautions were taken – The whole process was made simple. In place of preparing more paper bags at a time it was preferred to complete one paper-bag first and then start the process for the second one. To motivate the children, they were practically assured that their paper-bags will be sold in the market.

Process of making paper bags –

It is a very simple process and in different steps the process of paper bag making was completed. Before starting the actual process, the following demonstration was given to the children:

Step 1: The researcher and the trainer took two pages of newspapers. Out of which, one was given to the children and the second one was retained with the trainer. The investigator asked the children to see and concentrate to the procedure that what the trainer is doing and instructing.

Step 2: The paper was put on the floor and then this paper was folded sideways.

Step 3: In this step the folded paper was now pasted with the help of gum and the children were also asked to do the same with their paper. After some trials the children were able to do this step successfully.

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Step 4: The investigator asked the children to repeat the procedure of steps 1 to 3. After this, the paper was folded three inches from downwards and the same was asked to do by the children. After few trials the children were able to do the same successfully.

Step 5: The folded paper of step 4 was now folded in a shape of triangle. Similar procedure was repeated for the second side of the bag. It was a difficult step, therefore four days continuous practice was given to the children.

Step 6: After two days rest, repetition of all the steps learned so far by the children was again done here. The bottom of the bag is taken in this step and half of the portion was folded inside and pasted and then the remaining half was also folded and pasted in similar way. The children were asked to do the same process. This was the last and final step of paper-bag.

In this way, the paper has taken the shape of paper-bag. The children showed the feeling of achievement on their face and had shown much more confidence in this vocational training program.

Procedure

The children were seated comfortably and rapport was established with them. Then they were assigned to the vocational training program. It was assessed that the children were not having any concept of paper-bag. They were having the knowledge of paper only. The investigator told to the children that with the help of these papers we can prepare such type of paper-bag (showing the paper-bag to the children). They were then shown the material required for making paper bags i. e., newspapers and gum bottle. The investigator with the help of assistant demonstrated the procedure of paper bag making several times in front of the children, then the children were asked to repeat the same steps. In this way, the process of demonstration and the exercise of children were continued till the errorless making of paper-bag was done by the children. By using various teaching strategies and continuous motivation they developed confidence and soon learned to make paper bags independently.

Scoring

The scoring was done for the pre test and post test sessions. The scoring system was – for independent (5), occasional cue (4), gestural prompt (3), verbal prompt (2) and physical prompt (1) was given.

Statistical Analysis

To find out the significant difference between the pre test sessions and post test sessions paired comparison students 't' was calculated.

RESULTS AND DISCUSSION

Table: M, SD and 't' values of pre test and post test sessions on paper bag making (N = 5).

		Gross Motor	Fine Motor	Social Interaction	Task Analysis
Pre Test Session	M	2.75	3.18	2.67	1.57
	SD	1.50	1.88	1.12	.77
Post Test Session	M	4.31	4.00	3.39	3.35
	SD	.65	.91	.80	.62
	t	2.73 NS	1.64 NS	5.16**	10.80**

**p<.01, *p<.05, NS = Not Significant.

The aim of the present research was to give training to the mentally retarded children in paper bag making. The above table clearly shows that in gross motor area for making paper bags the children have obtained higher mean scores in post test session (M = 4.31, SD = .65) as compared to pre test session (M = 2.75, SD = 1.50). No significant difference was found between both the sessions (t = 2.73, NS) on gross motor area. It indicates that the children showed more or less similar gross motor skills in both the sessions. They were able to sit and stand without support, was able to pull furniture for rearrangement and was able to stand on tip toe to reach for an object at a height.

Table reveals that in fine motor area for making paper bags the children have obtained higher mean scores in post test session (M = 4.00, SD = .91) as compared to pre test session (M = 3.18, SD = 1.88). In this area also significant difference was not found between both the sessions (t = 1.64, NS). This indicates that the children showed more or less similar fine motor skills in both the sessions. They were able to reach and grasp objects, uses both hands at the same time when handling an object, picks up small objects using thumb and fingers only, able to tear off a perforated sheet.

It is clear from table that in social interaction area for making paper bags the children have obtained higher mean scores in post test session (M = 3.39, SD = .80) in comparison to pre test session (M = 2.67, SD = 1.12) and differ significantly on both the sessions (t = 5.16, p<.01). It shows that the skills on social interaction were developed in the children after training such as responding when touched by reaching towards or moving away, look towards or otherwise and indicate a person in the immediate area, able to identify by pointing, naming, friends and acquaintances from strangers, wait for own turn in a group. They were now able to use words like 'please', 'thank you' and 'sorry' at appropriate places. They were able to interact with members of the opposite sex and members of different groups easily. They also like to participate in group activities taking the role of a leader.

Similarly, on task analysis for making paper bags the above table shows that the children have obtained higher mean scores in post test session (M = 3.35, SD = .62) in comparison to pre test

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session ($M = 1.57$, $SD = .77$). Significant difference was found between both the sessions ($t = 10.80$, $p < .01$). It reveals that the children were able to learn the task easily when it was broken down in small simple steps and arranged in sequential order. Now, they were able to do the task independently. They were able to identify newspaper and gum bottle, folding the newspaper sideways, opening the gum bottle, applying gum on the open edges of the newspaper sideways by overlapping each other, folding the newspaper two inches from downwards, opening the folded part upward and downward, folding the upward and downward part inside and then applying gum on the folded part upward and downward by overlapping each other. After the task was over they closed the cap of the gum bottle and placed the paper bags in pile under some weight.

The children learned to make newspaper bags with 80% accuracy which shows that if rigorous training is given to the mentally retarded children they can become useful member of the society and can learn their living independently.

A visit to special schools or special education centers having the facilities for vocational training show that they impart training on specific trades like candle making, chalk making, canning of chairs, basket making, weaving, book binding, printing, making of envelopes and greeting cards etc. Such programmes are described as craft activities rather than any serious effort to train adult person with mental retardation in a vocation leading to employment or job placement (Kutty, 2006).

Rao and Shiva (2004) emphasize that in order to provide and expand a systematic vocational training and placement for the persons with mental retardation, there is a need to pay attention to vocational climate, full complement of vocational phases in the vocational training centers, more beneficial functional training for employment success in the special schools.

Similar findings have been reported by Jain and Gunthey (2007). They are of the view that if one adumbrates the mentally retarded children with proper attention, guidance, sufficient time, explain things to them in simple mode of working by the trainer as well as the society, then many fruitful results can come out. They further reported that activities like paper mashie, envelopes, pot making, mehandi, candle making, canning, carpentry, manual printing can be carried out as rehabilitation measures and to develop eye-hand coordination.

The present results also reveal that there was remarkable improvement in the children's performance. As the trials increased, the number of errors decreased. Persons with mental retardation being allowed the opportunities to make choices and decisions, to explore and take risks and to learn from experiences of success and failure, they will develop the abilities and attitudes necessary to be self determined adults.

Rehabilitation of Mentally Retarded Children through Environmental Protection

On the basis of the study by Jain and Gunthey (2010) it could be said that a mentally retarded individual needs stimulation, repeated chances, supervision and training to develop proper skills. Vocational skill training should be started as early as possible in his/her life. During infancy the child should get maximum stimulation from the family members. The family members should talk to the child whenever possible, even if he/she does not talk. During childhood, give him chance to play with other children. Continue the training through adolescence and adulthood in necessary vocational skills.

Before training, it is also experienced by the researcher that there are certain steps to be taken in the process of vocational training including group interaction, give chance to learn the skills through regular selected activities, gradually reduce the number of repeated instructions and observe their performance in natural environments, include them as a group member, in groups get-together, give them chance to participate in social and religious functions. Outings help in enhancing social skill training. Accept the mentally retarded children as a member of the group and the community.

While training the children, instructions were given time to time in the process of training. The words like please, thank you, very well, sorry are often used by the trainer whenever and wherever it was required. The parents were also asked during the training programme to allow the child to participate in household tasks to gain his confidence. They were also asked to take the child to visit relatives and friend's places and participate in social functions.

The following studies are also supported by the above training program and its outcome. From the time the first settlers arrived in the United States, there has always been a strong belief that "Individuals should be free to earn their livelihood in whatever way that proves most profitable". However, this belief has not been applied equally for all people, neither in America nor in any other part of the globe. The children with mental retardation having access to vocational training and employment are negligible throughout most of the part of this country. Even today, many children with mental retardation are unemployed in spite of the dramatic increase in vocational research and development that has taken place in the 1970s and 1980s (Bellamy et al. 1985; Revell, Wehman, & Arnold, 1985). Vocational training programme for mentally retarded children have often been narrowly focused: that is, these programs are often predicted upon the development of only one or two specific skill areas. Some programmes have prepared their clients for a job market that no longer exists. In some extreme cases, there is no career and/or vocational program at all. Career education is a total education concept that systematically coordinates all school, family and community components, thus, facilitating the individual's potential for economic, social and personal fulfillment. Brolin (1982) suggested six areas of primary responsibility for special educators in developing occupational guidance and preparation for such children: 1. Knowing and exploring occupational possibilities. 2. Making appropriate occupational decisions. 3. Exhibiting appropriate work behaviours. 4. Exhibiting sufficient

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physical and manual skills. 5. Acquiring specific saleable job skill. 6. Seeking securing and maintaining satisfactory employment.

Rao and Siva (2004) emphasize that, in order to provide and expand a systematic vocational training and placement for the persons with mental retardation, there is a need to pay attention to vocational climate, full complement of vocational phases in the vocational training centers, more beneficial functional training for employment success in the special schools.

Often it is seen that mentally retarded children are not seen with an equal eye in comparison to the normal child of the society. As it is known that if a normal child is motivated then he or she will do the best, and if they are boosted up, then they can reach up to their parents' expectations. Previously mentally retarded children were debarred from the society, but now people of the society are trying to help them so that they can find some rehabilitation measures to hold up themselves for their betterment. Many NGOs, other organizations as well as child welfare societies are engaged with such type of activities for the mentally retarded children. Gunthey (2004) reported in his pilot study that if proper and rigorous training with patience is given to mentally retarded children their potential skills can be used in the promotion of environmental protection.

Table: Showing no. of paper bags made by the children in each session.

Sessions	Time in min.	Reinforcement	No. of paper bags made
Pre Test 1	60	4	0
Pre Test 2	60	4	0
Pre Test 3	60	4	0
Pre Test 4	60	4	0
Application (Treatment) of 30 days			
Post Test 1	10	0	6
Post Test 2	12	1	5
Withdrawal of 15 days			
Post Test 3	15	2	4
Reapplication (Treatment) of 15 days			
Post Test 4	10	0	6

CONCLUSION

The basic aim of this research work was to develop rehabilitation activities among the mentally retarded children and it was successfully done with the training programme. The training process was used which seems to be very effective for such type of work. Time to time verbal encouragement and positive reinforcement were given to the children. In the training programme, looking to the abilities of the child, procedure was broken-down into simple steps and the next step was not followed till errorless completion of the steps was not shown by the

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child. The interests were also observed in the marketing of paper bags they have prepared. Investigator has recommended that few shops should be contracted for the purpose of marketing. On the basis of evaluation of training programme, it is reported that skills for the task like making of paper bags are developed with the help of vocational training. Effect of training is clearly perceived in eye hand coordination, correct steps of tasks, concentration and production of the items among these children.

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Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Bellamy, G.T., Rhodes, L. & Albin, J.M. (1985). Support employment (Unpublished manuscript). Oregon, University of Oregon, Eugene.
- Brolin, D.E. (1982). The Retarded Adolescent. Vocational preparation of persons with handicaps. Columbus, OH, Merrill.
- Gunthey, R. (2004). Protection of environment through rehabilitation program for mentally retarded children. National Conference on Support to Children with Disabilities. Secunderabad, NIMH.
- Jain, M. and Gunthey, R. K. (2007). Vocational training programme for mentally handicapped children – A psychological approach. Psychology in Use (Readings). Jodhpur, J. V. Publishing House.
- Jain, M. and Gunthey, R. K. (2010). Card making training to a mentally retarded child. Disabilities and Impairments, 24 (2), 132 – 136.
- Kutty, A. T. T. (2006). Principles of Vocational Training (Part – 2). DVTE (MR) Manual. New Delhi, Kanishka Publishers.
- Mathur, S. and Mathur, V. (2007). Parental counseling regarding self dependence for “Differently Abled” children. Psychology in Use (Readings). Jodhpur, J. V. Publishing House.
- Peshawaria, R. & Venkatesan, S. (1992). Behavioural Assessment Scales for Indian Children with Mental Retardation. Secunderabad, NIMH.
- Rao, G. L. and Sivakumar, T. C. (2004). Re-engineering the vocational training for mentally retarded. Journal of Community Guidance and Research, 5-20.
- Revell, W.G., Wehman, P. & Arnold, S. (1985). A supported work approach to competitive employment of individuals with moderate and severe handicaps. In P. Wehman and J.W. Hill (Eds.), Competitive employment for persons with mental retardation. From

Rehabilitation of Mentally Retarded Children through Environmental Protection

Research to practice, 46-64. Richmond, VA, Rehabilitation Research and Training Centre, School of Education, Virginia Commonwealth University.

Vimala, V. (1992). Madras Developmental Programming System. Chennai, Vijay Human Services.



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